# **DNA Ladders**

## **BrightMAX<sup>™</sup> DNA Ladders**

For a highly efficient, bright and accurate DNA Fragment Separation on Agarose Gels



**Includes for 50 μg:** • 50 μg of BrightMAX<sup>™</sup> DNA Ladder (0.1 μg/μL)



#### **Description:**

Highly efficient, bright and accurate **BrightMAX™ DNA Ladders** for visualization on agarose gel DNA size standards. Canvax manufactures 7 different DNA size standards for small and large DNA molecules. These standards are ready-to-use markers which contain loading dye with one or two migration visualisation dye.

#### **Related products:**

- TAE (p.138)
- TBE (p.138)
- Loading Buffers (p.117)
- Horse-Power™ Taq DNA Polymerase (p.103)

#### Advantages & Features:

- Ready-to-use format to perfect visualization on agarose gel.
- ✓ Well-defined bands patterns.
- ✓ Highly Stable at Room Temperature.
- Bright and accurate.
- ✓ **Tested** with Ethidium bromide and Gel green.

#### **Applications:**

✓ Molecular weight standards for gel electrophoresis.

#### Quality control:

✓ Agarose gel electrophoresis.

	25 - 700 bp	50 - 1,000 bp	100 - 1,000 bp	100 - 2,000 bp	100 - 1,500 bp	300 - 10,000 bp	Lambda DNA/ HindIII Marker
	bp           -700           -500           -400           -300           -200           -150           -100           -75           -50           -25	bp           -1000           -900           -800           -700           -600           -500           -450           -400           -350           -300           -250           -100           -100           -50	bp         -1000         -900         -800         -700         -600         -500         -400         -300         -200         -100	bp         -2000         -1500         -1250         -1000         -900         -800         -700         -600         -500         -400         -300         -200         -100	bp           -1500           -1000           -900           -800           -700           -600           -500           -400           -300           -200           -100	bp           -10000           -8000           -6000           -5000           -4000           -3000           -2500           -10000           -1500           -10000           -3000           -3000           -3000           -2000           -1500           -3000           -3000	bp         -23130         -9416         -6557         -4361         -2322         -2027
	3% TAE Agarose, ethidium bromide stain	2.5% TAE Agarose, ethidium bromide stain	2.5% TAE Agarose, ethidium bromide stain	2% TAE Agarose, ethidium bromide stain	2.5% TAE Agarose, ethidium bromide stain	0.7% TAE Agarose, ethidium bromide stain	0.7% TAE Agarose, ethidium bromide stain
Catalog Number							
20 µg	L0007-S	L0009-S	L0011-S	L0013-S	L0015-S	L0017-S	L0020-S
50 µg	L0007	L0009	L0011	L0013	L0015	L0017	L0020
250 µg	L0008	L0010	L0012	L0014	L0016	L0018	L0021



# **Loading Buffers**

#### Includes for 5 mL:

5 x 1 mL of selected Loading Buffer



**Related products:** 

• BrightMAX<sup>™</sup> DNA Ladders (p.116)

• TAE (p.137)

· TBE (137)

#### Advantages & Features: High quality.

- Proven performance for DNA Ladders preparation.
- ✓ Optimized for protect sample from nuclease degradation, provide high density and to be confined in the well without diffusing out from the well.

#### Applications:

Preparation of DNA Ladders, markers and samples for loading on agarose or polyacrylamide gels.

#### Quality control:

Exempt of nucleases (endo, exo and ribonucleases) activities guaranteed by appropriate quality tests.

## 6x BX

#### Ordering info:

Cat No.	Size
L0030	5 x 1 mL

#### **Concentration:**

0.03% bromophenol blue, 0.03% xylene cyanol FF, 60% Glycerol, 10 mM Tris-HCl (pH 7.6) and 60 mM EDTA.

#### **Description:**

6X BX/Loading Buffer is used as a loading dye for visual tracking of DNA migration during electrophoresis. It incorporates Bromophenol blue and Xylene Cyanol FF as tracking dye. Bromophenol blue migrates fast in the agarose gel and corresponds to the migration of a 300 - 500 bp long DNA fragment in a 1% agarose gel. Xylene cyanol FF migrates comparatively slower and corresponds to the migration of a 4,000 -5,000 bp long DNA fragment in a 1% agarose gel.

EDTA is included in the solution to protect the sample from nuclease degradation. Glycerol is added to provide high density to the solution. Due to its high density, the sample settles at the bottom of the well. It also helps DNA samples to be confined in the well without diffusing out from it.

Quality control:



## **6x** B

#### Ordering info:

Cat No.	Size
L0031	5 x 1 mL

#### **Concentration:**

0.03% bromophenol blue, 60% Glycerol, 10 mM Tris-HCI (pH 7.6) and 60 mM EDTA.

#### **Description:**

6X B/Loading Buffer is used as a loading dye for visual tracking of DNA migration during electrophoresis. It incorporates Bromophenol blue. Bromophenol blue migrates fast in the agarose gel and corresponds to the migration of a 300 - 500 bp long DNA fragment in a 1% agarose gel.

EDTA is included in the solution to protect sample from nuclease degradation. Glycerol is added to provide high density to the solution. Due to its high density, sample settles at the bottom of the well. It also helps DNA samples to be confined in the well without diffusing out from it.





1% agarose gel

## 6x 0X Ordering info:

Cat No.	Size
L0032	5 x 1 mL
	·

#### Concentration:

0.15% orange G, 0.03% xylene cyanol FF, 60% Glycerol, 10 mM Tris-HCI (pH 7.6) and 60 mM EDTA

#### **Description:**

6X OX/Loading Buffer is used as a loading dye for visual tracking of DNA migration during electrophoresis. It incorporates Orange G and Xylene Cyanol FF as tracking dye. Orange G migrates comparatively very fast and corresponds to the migration of a 50 bp long DNA fragment in 1% agarose gel. Xylene cyanol FF migrates comparatively slower and corresponds to the migration of a 4,000 – 5,000 bp long DNA fragment in a 1% agarose gel.

The EDTA is included in the solution to protect samples from nuclease degradation. Glycerol is added to provide high density to the solution. Due to its high density, sample settles at the bottom of the well. It also helps DNA samples to be confined in the well without diffusing out from it.



1% agarose gel

# 8. Recombinant Proteins

# **Recombinant Proteins**

# **Recombinant proteins**



#### Includes:

· Recombinant Protein

• Dry ice

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#### **Related products:**

- Protein Expression Services (p.140)
- Small scale recombinant protein production Services (p.140)
- · Monoclonal antibodies (p.123)
- · Polyclonal antibodies (p.123)
- Polyclonal & Monoclonal Antibody Production Services (p.140)

#### **Description:**

Canvax offers a wide range of high quality Human Recombinant proteins for several research applications like ELISA, Western Blot, Antibody Production or Protein array.

#### Advantages & Features:

- Highest purity: free of interferences from other proteins or contaminants.
- Tagged versions: including His-tagged, GST-tagged and untagged versions.
- Convenient: available in different formats.
   Cost avoidance: dry ice free of charge.
- Cost avoidance: dry ice free of

#### Applications:

- ✓ ELISA.
- Western Blot.Antibody Production.
- Protein array.

#### Quality control:

- SDS-PAGE stained with Coomassie Blue (CB).
   Immunobloting (WB).
- Peptide fingerprinting by MALDI-TOF-TOF mass spectrometry.

Figure 8.1.: Example of Quality control for Human Annexin A4 (ANXA4) recombinant protein.



Description	Origin	Purity	Catalog No.	Size
Human AKT1 (RAC-alpha serine/theorine-proteine-protein kinase), 6xHis tagged	E. coli	>90%	PR0331 PR0332 PR0333	20 μg 50 μg 100 μg
Human AKT1 (RAC-alpha serine/theorine-proteine-protein kinase), 6xHis-GST tagged	E. coli	>95%	PR0301 PR0302 PR0303	20 μg 50 μg 100 μg
Human ANXA1 (Annexin A1), GST tag	E. coli	>90%	PR0241 PR0242 PR0243	10 μg 25 μg 50 μg
Human ANXA2 (Annexin A2), 6xHis tag	E. coli	>95%	PR0251 PR0252 PR0253	10 μg 25 μg
Human ANXA3 (Annexin A3), 6xHis tag	E. coli	>95%	PR0011 PR0012 PR0013	10 μg 25 μg
Human ANXA4 (Annexin A4), 6xHis tag	HEK293E	>99%	PR0021 PR0022	10 μg 25 μg
Human ANXA5 (Annexin A5), 6xHis tag	E. coli	>95%	PR0291 PR0292	10 µg 25 µg
Human ANXA6 (Annexin A6), 6xHis tag	E. coli	>95%	PR02/3 PR0261 PR0262	10 µg 25 µg
Human ANXA9 (Annexin A9), 6xHis tag	E. coli	>95%	PR0263 PR0271 PR0272	10 µg 25 µg
Human ANXA10 (Annexin A10), GST tag	E. coli	>95%	PR0273 PR0281 PR0282	10 μg 25 μg
Human BMP4 (Bone morphogenetic protein 4), His-MBP tags	E. coli	>90%	PR0283 PR0031 PR0032	20 μg 50 μg
Human BTLA (B-and T-lymphocyte attenuator), 6xHis tag	E. coli	>95%	PR0033 PR0221 PR0222	100 μg 10 μg 25 μg
Human Calcinesurin heterodimer (PPP3CA & PPP3R1), MBP tag	E. coli	>90%	PR0223 PR0481 PR0482	50 μg 10 μg 25 μg
Human CTHRC1 (Collagen triple helix repeat-containing 1), MBP tag	E. coli	>95%	PR0483 PR0471 PR0472	50 μg 10 μg 25 μg
Human CTHRC1 (Collagen triple helix repeat-containing 1), MBP tag	E. coli	>90%	PR04/3 PR0441 PR0442	50 μg 25 μg 50 μg
Human CXCL1 (Growth-regulated alpha protein), MBP tag	E. coli	>95%	PR0443 PR0051 PR0052	100μg 10 μg 25 μg
Human CXCL3 (C-X-C motif chemokine 3), MBP tag	E. coli	>95%	PR0053 PR0061 PR0062	50 μg 10 μg 25 μg
Human CypA (Cyclophilin A), without tag	E. coli	>95%	PR0063 PR0461 PR0462	50 μg 10 μg 25 μg
Human DIABLO (Diablo homolog, mitochondrial), 6xHis-GST tagged	Insect Sf9	>90%	PR0463 PR0401 PR0402	50 μg 10 μg 25 μg
Human EDIL3, 6xHis tag	Sf9- Baculovirus	>80%	PR0403 PR0591 PR0592	50 μg 10 μg 25 μg
Human EDIL3, GST tag	Sf9- Baculovirus	>80%	PR0593 PR0601 PR0602	50 µg 10 µg 25 µg
Human EFNB2 (Ephrin-B2) extracellular domain, Fc and 6xHis	HEK293E	>99%	PR0603 PR0071 PR0072	50 μg 10 μg 25 μg
Human EMILIN1 (Emilin 1), 6xHis tagged	E. coli	>95%	PR0073 PR0441 PR0442	50 μg 10 μg 25 μg
Human EMILIN1 (Emilin 1), 6xHis-GST tagged	E. coli	>90%	PR0443 PR0431 PR0432	50 μg 10 μg 25 μg
Human FGF2 (Fibroblast Growth Factor 2), 6xHis tag	Insect Sf9	>80%	PR0433 PR0491 PR0492	50 μg 5 μg 10 μg
Human FGF2 (Fibroblast Growth Factor 2), 18kDa isoform, 6xHis tag	E. coli	>90%	PR0493 PR0501 PR0502	25 μg 10 μg 25 μg
Human FGFR3 (Fibroblast Growth Factor receptor 3), extracellular domain, Fc and 6xHis tag	HEK293E cells	>99%	PR0503 PR0081 PR0082	50 μg 20 μg 50 μg
Human FKBP12 (Calstabin 1), without tag	Insetc Sf9	>95%	PR0083 PR0451 PR0452	100 μg 10 μg 25 μg
Human FLT3LG, GST tag	Sf9- Baculovirus	>70%	PR0453 PR0691 PR0692	50 μg 10 μg 25 μg
Human GABPB, 6xHis tag	Sf9- Baculovirus	>90%	PR0693 PR0651 PR0652	10 μg 25 μg
Human GABPB1, GST tag	Sf9- Baculovirus	>90%	PR0661 PR0662	10 µg 25 µg
Human GRB2 (Growth Factor Receptor-Bound Protein 2) 6xHis-GST tagged	E. coli	>95%	PR0341 PR0342 PR0342	20 µg 50 µg
Human GRB2 (Growth Factor Receptor-Bound Protein 2) 6xHis tagged	E. coli	>95%	PR0251 PR0252	20 µg 50 µg
Human GTF2E1, GST tag	Sf9- Baculovirus	>70%	PR0671 PR0672 PR0673	10 µg 25 µg
Human TDGF1 (Teratocarcinoma-derived growth factor 1), MBP tag	E. coli	>95%	PR0201 PR0202 PR0203	10 µg 25 µg

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Description	Origin	Purity	Catalog No.	Size
Human GTF2E1, 6xHis tag	E. coli	>70%	PR0681 PR0682 PP0683	10 μg 25 μg 50 μg
Human HN1 (Hematological and neurological expressed 1 protein), 6xHis-tag	E. coli	>90%	PR0311 PR0312 PR0313	10 μg 25 μg 50 μg
Human HN1 (Hematological and neurological expressed 1 protein), 6xHis tag	E. coli	>95%	PR0321 PR0322	10 μg 25 μg
Human IFITM2 (Interferon-induced transpembrane protein 2), 6His-GST tag	E. coli	>90%	PR0923 PR0091 PR0092	10 μg 25 μg
Human IFITM3 (Interferon-induced transpembrane protein 3), 6His-GST tag	E. coli	>90%	PR0093 PR0101 PR0102	10 μg 25 μg
Human IL6 (Interleukin 6), 6xHis tag	E. coli	>95%	PR0103 PR0111 PR0112	50 μg 25 μg 50 μg
Human IL6 (Interleukin 6), without tag	E. coli	>95%	PR0113 PR0581 PR0582	100 μg 20 μg 50 μg
Human IL8 (72aa residues) (Interleukin 8), 6His tag	E. coli	>95%	PR0583 PR0121 PR0122	100 μg 25 μg 50 μg
Human IL8 (72aa residues) (Interleukin 8), without tag	E. coli	>95%	PR0123 PR0561 PR0562	100 μg 25 μg 50 μg
Human IL8 (77aa residues) (Interleukin 8), 6His tag	E. coli	>95%	PR0563 PR0131 PR0132	100 μg 25 μg 50 μg
Human II 8 (77a) residues) (Interlaukin 8) without tag	E coli	>95%	PR0133 PR0571	100 μg 25 μg
numan ilo (77aa resiuues) (interieuxin 6), without tag	CHO-K1	-73%	PR0572 PR0573	100μg
Human KAL1 Overexpression lysate product, Tag-free	cells	>90%	PR0511	200 μg
Human KAL1 (Aposmin 1) partial (297 residues), 6xHis tag	E. coli	>90%	PR0522 PR0523	25 μg 50 μg
Human LCN2 (Lipocalin 2), GST tag	E. coli	>95%	PR0141 PR0142 PR0143	10 μg 25 μg 50 μg
Human MEF2A, 6xHis tag	E. coli	>90%	PR0611 PR0612 PR0613	10 μg 25 μg 50 μg
Human MEF2A, GST tag	Sf9- Baculovirus	>90%	PR0621 PR0622 PR0623	10 μg 25 μg 50 μg
Human MMP7 (Matrilysin), 6His tag	E. coli	>95%	PR0151 PR0152 PR0153	10 μg 25 μg 50 μg
Human MMP11 (Stromelysin-3), 6His-GST tag	E. coli	>80%	PR0161 PR0162 PR0163	10 μg 25 μg 50 μg
Human PDCD2 (Programmed cell death protein 2), MBP tag	E. coli	>90%	PR0231 PR0232 PR0233	10 μg 25 μg 50 μg
Human RAB2A (Bas-related protein Rab-2A) 6xHis tagged	E. coli	>95%	PR0361 PR0362 PR0363	10 μg 25 μg 50 μg
Human RAB2A (Bas-related protein Rab-2A) 6xHis-GST tagged	E. coli	>95%	PR0303 PR0371 PR0372	10 μg 25 μg 50 μg
Human SEPT5 (Septin 5), 6xHis-GST tagged	E. coli	>95%	PR0373 PR0381 PR0382	10 μg 25 μg
Human SEPT5 (Septin 5), 6xHis tagged	E. coli	>95%	PR0383 PR0391 PR0392	50 μg 10 μg 25 μg
Human SPARC (Ostennectin), MBP tag	E. coli	>90%	PR0393 PR0171 PR0172	50 μg 20 μg 50 μg
Human SPP1 (Ostennectin), GST tag	E. coli	>90%	PR0173 PR0181 PR0182	100 μg 20 μg 50 μg
Human SPP1 (Ostennectin), MBP tag	E. coli	>80%	PR0183 PR0191 PR0192	100 μg 20 μg 50 μg
Human TCEAL2, óxHis tag	Sf9-	>70%	PR0193 PR0631 PR0632	100 μg 10 μg 25 μg
Human TCEAL2, GST tag	Sf9-	>70%	PRO633 PR0641 PR0642	50 μg 10 μg 25 μg
Human TERF1 (Telomecic repeat-binding factor1). 6xHis-GST tags	E. coli	>85%	PRO643 PR0421 PR0422	50 μg 10 μg 25 μg
Human TEDE1 (Tolomacic report hinding factor 1) Avidis tagged	СНО-К1	>85%	PRO423 PRO411 PRO412	50 μg 10 μg
Human TIMP1 (Metalloproteinace inhibitor 1) MRP to:	cell E. coli	>90%	PR0413 PR0211 PR0212	50 μg 10 μg
Human Thirt (Metallophoteniase miniDitor 1), MDP tag	E. coli	~ 70.76	PR0212 PR0213 PR0551	25 μg 50 μg 10 μg
ruman myra (Tumor ivecrosis ractor) partial (157 ass) o'His-tagged	E. COII	>90%	PR0552 PR0553 PR0531	25 μg 50 μg 10 μg
Human VEGF A (Vascular Endothelial Growth Factor A), 6xHis tag	Baculovirus	>90%	PR0532 PR0533 PR0541	25 μg 50 μg 10 μg
Human VEGF A (Vascular Endothelial Growth Factor A), 6xHis tag	cell	>90%	PR0542 PR0543 PR0231	25 μg 50 μg 10 μg
Human PDCD2 (Programmed cell death protein 2), MBP tag	E. coli	>95%	PR0232 PR0233	25 μg 50 μg

# 9. Antibodies & Serums

Antibodies Serums, Plasma and Albumin

Photo: Crossection of glandular ducts

# **Antibodies & Serums**

## **Antibodies**

For highest performance and purity for Elisa or Western Blot



#### **Related Products:**

- · Recombinant Proteins (p.119)
- Protein Expression Services (p.140)
- · Small scale recombinant Protein production Services (p.140)
- · Polyclonal & Monoclonal Antibody Production Services (p.140)

#### **Description:**

Canvax has designed, properly prepared and characterized a portfolio of monoclonal and polyclonal antibodies for ELISA and Western Blot applications.

#### **Applications:**

#### FLISA.

- ✓ Western Blot.
- Immunohistochemistry.

#### Advantages & Features:

- ✓ Proven performance for Elisa and Western Blot.
- Highest performance and purity.
- ~ Human specifity: reactivity with other species untested.
- Cost avoidance: dry ice free of charge. ✓ Purification Method: protein G/A affinity
- chromatography.

#### **Polyclonal antibodies**

Host	Antibody	Protein	Isotype	Catalog Number	Unit Size
Rabbit	Anti-ANXA1	Annexin A1	lgG	PA001	100 µg
Rabbit	Anti-ANXA2	Annexin A2	lgG	PA002	100 µg
Rabbit	Anti-ANXA3	Annexin A3	lgG	PA003	100 µg
Rabbit	Anti-ANXA5	Annexin A5	lgG	PA004	100 µg
Rabbit	Anti-ANXA6	Annexin A6	lgG	PA005	100 µg
Rabbit	Anti-ANXA9	Annexin A9	lgG	PA006	100 µg
Rabbit	Anti-ANXA10	Annexin A10	lgG	PA007	100 µg
Rabbit	Anti-FGF2	Fibroblast Growth Factor 2	lgG	PA008	100 µg
Rabbit	Anti-KAL1	Anosmin 1	lgG	PA009	100 µg

#### Quality control:

IHC

Example of Quality control for Rabbit Anti-ANXA1 (Annexin A1):

Human colon carcinoma





#### **Monoclonal antibodies**

Host	Antibody	Protein	lsotype	Clone	Catalog Number	Unit Size
Mouse	Anti-LCN2	Lipocalin 2	lgG1ĸ	PA348-26.3.5	MA0001	100 µg
Mouse	Anti-ANXA4	Annexin A4	lgG2ак	PA351-29.1.3	MA0002	100 µg
Mouse	Anti-EFNB2	Ephrin B2	lgG1ĸ	PA349-18.4.3	MA0003	100 µg
Mouse	Anti-NR1H4	Bile acid receptor isoform 2	lgG1	322.1.2.2	MA0004	100 µg
Mouse	Anti-BMP4	Bone morphogenetic protein 4	lgG1ĸ	PA354-16.1.1	MA0005	100 µg
Mouse	Anti-FGF2	Fibroblast Growth Factor 2	lgG1	PA341.15.23.3	MA0006	100 µg
Mouse	Anti-KAL1	Anosmin 1	lgG1	PA343-13.22.2	MA0007	100 µg
Mouse	Anti-NGFR	Nerve Growth Factor Receptor	lgG1	HB-8737 (20.4)	MA0320	100 µg
Mouse	Anti-FITC	Fluorescein	lgG2a	4.4.20	MA0330	100 µg

нс

20x

#### **Quality control:**

Example of Quality control for Mouse Monoclonal Anti-LCN2:



# Animal Serum, Plasma and Albumin

# List of commercial Serum, Plasma and Albumin availables:

Product	Catalog No.	Size
Fetal Bovine Serum (FBS)	SUF001 SUF002	20 ml 50 ml
Horse Serum	SUH001 SUH002	20 ml 50 ml
Donor Foal Serum	SUD001 SUD002	20 ml 50 ml
Donkey Serum	SUD004 SUD005	20 ml 50 ml
Goat Serum	SUG001 SUG002	20 ml 50 ml
Lamb Serum	SUL001 SUL002	20 ml 50 ml
Sheep Serum	SUS001 SUS002	20 ml 50 ml
Pig Serum	SUP001 SUP002	20 ml 50 ml
Chicken Serum	SUC004 SUC005	20 ml 50 ml
Rabbit Serum	SUR001 SUR002	20 ml 50 ml
Rat Serum	SUR004 SUR005	20 ml 50 ml
Mouse Serum	SUM001 SUM002	20 ml 50 ml
Guinea Pig Serum	SUG004 SUG005	20 ml 50 ml
Bovine Plasma w/ Sodium Citrate	SUB004 SUB005	20 ml 50 ml
Rabbit Plasma w/ EDTA	SUR007 SUR008	20 ml 50 ml
Rat Plasma w/ Lithium Heparin	SUR010 SUR011	20 ml 50 ml
Bovine Serum Albumin (BSA) Lyophilised pH ~7	SUB001 SUB002	20 ml 50 ml
Bovine Serum Albumin (BSA) 30 % liquid	SUB010 SUB011	20 ml 50 ml
Human Plasma pooled	SUM007 SUM008	20 ml 50 ml
Human Serum Albumin Lyophilised	SUM010 SUM011	20 ml 50 ml



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# **10.** Antibiotics

# **Antibiotics**

# **Ampicillin Sodium salt**

#### Ordering info:

Cat No.	Size
AB001	10 g
AB002	25 g



# Chloramphenicol

#### Ordering info:

Cat No.	Size
AB003	25 g
AB004	50 g

#### **Specifications:**

CAS No: 69-52-3 MDL No: MFCD00064313 Chemical Formula: C16H18N3O4SNa Molecular Weight: 371.39 **pH:** 8.0 - 10.0 Water content: >2.0%



#### Specifications:

CAS Number: 56-75-7 Chemical Formula:  $C_{11}H_{12}CI_2N_2O_5$ Molecular Weight: 323.13 Appearance: White or slightly yellow Assay: 98.0~102.0% Loss on drying: >0.5%



# 

# Kanamycin Sulphate

#### Ordering info:

Cat No.	Size
AB005	5 g
AB006	25 g



# **Carbenicillin Disodium**

#### Ordering info:

Cat No.	Size
AB007	1 g
AB008	5 g



# **Tetracycline Hydrochloride**

#### Ordering info:

Cat No.	Size
AB009	25 g
AB010	50 g



**Specifications:** 

Loss on drying: >2%

Potency:<750 µg/mg

CAS Number: 25389-94-0

Chemical Formula: C18H36N4 Molecular Weight: 582.58

**Specifications: CAS Number:** 4800-94-6 Chemical Formula: C17H16N2Na2O6S Molecular Weight: 422.36 Appearance: White to pale yellow powder Purity (on dried basis):<90% Water content: >5%

Appearance: White to off-white crystalline powder





#### **Specifications:**

CAS Number: 64-75-5 Chemical Formula: C22H25CIN2O8 Molecular Weight: 480.90 Appearance: Yellow powder Potency:<950 µg/mg Specific optical rotation: -240 to -255°



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# **Antibiotics**

# Gentamicin Sulphate

#### Ordering info:

Cat No.	Size
AB011	5 g
AB012	10 g



# Neomycin

#### Ordering info:

Powder format		
Cat No.	Size	
AB018	1 g	
AB019	5 g	
Ready-to-use format		
Ready-to-use form	nat	
Ready-to-use form Cat No.	nat Size	
Ready-to-use form Cat No. AB021	nat Size 10 mL	

#### 

#### Specifications:

CAS Number: 1405-41-0Chemical Formula:  $C_{60}H_{125}N_{15}O_{25}S$ Loss on drying: >18% Appearance: White or slightly yellow Activity anhydrous basis:<590 ug/mg Gentamicin content: C1a: 10 - 35% Gentamicin content: C1: 25 - 55% Gentamicin content: C1: 25 - 50% pH: 3.5 - 5.5 Molecular Weight: 1488,79

#### Specifications:

Specifications:

CAS Number: 58-58-2

Chemical Formula: C<sub>22</sub>H<sub>29</sub>N<sub>7</sub>O<sub>5</sub>.2HCl Molecular Weight: 544.44 Purity (HPLC): > 98%

Formula: C<sub>23</sub>H<sub>46</sub>N<sub>6</sub>O<sub>13</sub>·xH<sub>2</sub>SO<sub>4</sub> Molecular weight: 614.7 (Base) Potency: min. 680 pH (1% in H<sub>2</sub>O): 5.0 – 7.5 Sulfate (%): 27.0 – 31.0 Origin : microbiological fermentation Sulfated ash: <1.0





# Puromycin dihydrochloride

#### Ordering info:

Powder format		
Cat No.	Size	
AB024	1 g	
AB025	5 g	
Ready-to-use format		
Cat No.	Size	
AB027	10 mL	
AB028	50 ml	



# Hygromycin

#### Ordering info:

Powder format		
Cat No.	Size	
AB030	1 g	
AB031	5 g	
Ready-to-use format		
Cat No.	Size	
AB033	10 mL	
AB034	50 mL	



#### Specifications:

CAS Number: 31282-04-9 Chemical Formula: C20H37N3O13 Molecular Weight: 527.52 Purity (HPLC): > 92% Potency: > 1,000 U/mg



# HO NH OH NH<sub>2</sub> OCH<sub>3</sub>

∕ CH₃

# **11.** Magnetic Particles

Photo: Light micrograph of white adipose tissue stained with hematoxylin and eosin adipocytes fat cells

# CaxBeads<sup>™</sup> Magnetic Particles

Widely functionalized ferromagnetic particles including uniform non-porous silica beads



# Concentration: 50 mg/mL

# <u>CaxBeads™</u>C8

#### Ordering info:

Cat No.	Size
MP021	4 mL
MP022	10 mL

# CaxBeads<sup>™</sup> C4

#### Ordering info:

Cat No.	Size
MP011	4 mL
MP012	10 mL

# CaxBeads<sup>™</sup> C18

#### Ordering info:

Cat No.	Size
MP001	4 mL
MP002	10 mL

# CaxBeads<sup>™</sup> DEAE

#### Ordering info:

Cat No.	Size
MP031	4 mL
MP032	10 mL

# CaxBeads<sup>™</sup> IDA

#### Ordering info:

Cat No.	Size
MP041	4 mL
MP042	10 mL

#### Description:

CaxBeads<sup>™</sup> Magnetic Particles include a wide range of ferromagnetic particles with a magnetite core coated with nonporous silica and functionalized with different reactive groups. CaxBeads™ ferromagnetic particles have been optimized to improve its very strong magnetic properties, therefore offering a fast separation with an external magnetic field even in viscous media. These 250-300 nm uniform high-quality particles are ideal for many applications such as purification of DNA/RNA and proteins, immobilization of target molecules, cell sorting, immunoassay or proteomics.

#### Advantages & Features:

- High quality.
  - Proven performance.
  - Rapid and robust.
  - Easy scalability and flexibility.

#### Quality control:

 Stringent quality control standards to guarantee lot-to-lot consistency.

#### Related Products:

- MagBeads<sup>™</sup> Yeast Genomic DNA Isolation Kit (p.96)
- MagBeads<sup>™</sup> Plasmid Purification Kit (p.96)
- MagBeads™ Plant Genomic DNA Isolation Kit (p.97)
- MagBeads™ PCR Cleanup Kit (p.95)
- MagBeads<sup>™</sup> Bacteria G (+) Genomic DNA Isolation (p.95)
- MagBeads™ Bacteria G (-) Genomic DNA Isolation (p.94)

#### Description:

Description:

**Description:** 

Ferromagnetic particles coated with hydrophobic C8 alkyl gropus on the surface of non-porous silica beads. **CaxBeads™ C8** offer an intermediate hydrophobicity (less hydrophobic than C18 and more hydrophobic than C4 beads), most suitable for low to intermediate molecular weight protein purification. **Functional Group:** -CH<sub>2</sub>-(CH<sub>2</sub>)<sub>6</sub>-CH<sub>3</sub>

Ferromagnetic beads coated with hydrophobic C4 alkyl groups on the surface of

purification and fractionation of larger biomolecules. Although in many cases the

Ferromagnetic particles coated with hydrophobic C18 alkyl gropus on the surface

CaxBeads<sup>™</sup> DEAE is a weak anionic resin with a thick cover of diethyl-aminoethyl

groups, rendering the amine group as a quaternary amine. The beads allow the rapid release of very strong anions. These beads are specifically designed for easier

and quicker fractionation of proteins/ peptides from complex biological samples.

Functional Group: Diethylaminoethyl (-CH<sub>2</sub>-N-(CH<sub>3</sub>)<sub>2</sub>)

desalting and concentration of low molecular weight proteins or peptides.

of non-porous silica beads. C-18 Magnetic beads are recommended for purification,

non-porous silica. The relatively low hydrophobicity of the C4 beads allows the

three types of reverse phase magnetic beads can be used interchangeably, C4

beads are most suitable for larger molecular weight proteins.

Functional Group: -CH<sub>2</sub>-(CH<sub>2</sub>)<sub>2</sub>-CH<sub>3</sub>

Functional Group: -CH<sub>2</sub>-(CH<sub>2</sub>)<sub>16</sub>-CH<sub>3</sub>

#### Applications:

- Adsorption of Biomolecules.
- ✓ MALDI sample preparation.
- Adsorption or isolation of Proteins.Immobilization by adsorption.

#### Applications:

- ✓ Adsorption of Biomolecules.
- Adsorption or isolation of Proteins.
- Immobilization by adsorption.
- ✓ MALDI sample preparation.
- Fractionation of larger molecular weight proteins and peptides.
- Rapid release hydrophobic molecules by weaker organic solvents.

#### Applications:

- Binds most organic analytes from aqueous matrices.
- Extraction of numerous analytes diverse in structure for the same sample.
- Adsorption of Biomolecules.
- ✓ MALDI sample preparation.
- Adsorption or isolation of Proteins.
- Immobilization by adsorption.

#### Applications:

- Weak Anionic exchange resin.
- Nucleic acid caption, adsorption, isolation or purification.
- ✓ Adsorption of Biomolecules.
- Adsorption or isolation of Proteins.

#### Description:

Description:

CaxBeads<sup>™</sup> IDA are coated with high-density iminodiacetic Acid (IDA) functional groups on the surface. It can be charged with nickel (Ni<sup>+2</sup>), cobalt (Co<sup>+2</sup>), zinc (Zn<sup>2+</sup>) or copper (Cu<sup>2+</sup>). They are used for immobilized metal affinitychromatography (IMAC). CaxBeads<sup>™</sup> IDA-Ni<sup>2+</sup> has three Ni<sup>2+</sup> binding sites to His TAG, while chelates resins have two Ni<sup>2+</sup> binding sites. More binding sites to metal means more affinity to metal, resulting in less loss of metal (less metal contamination in the elution). Functional Group: silanol-iminodiacetic acid-Metal (Ni<sup>2+</sup> or other).

#### **Applications:**

- Isolation, purification or immobilization of Histidine modified proteins.
- Inmobilized metal affinity chromatography (IMAC).

# CaxBeads<sup>™</sup> AmineLC

#### Ordering info:

Cat No.	Size
MP101	4 mL
MP102	10 mL

#### Description:

CaxBeads<sup>™</sup> Amine LC is an anionic exchange resin with a high density of primary amine as functional group on the surface of ferromagnetic beads. The beads are used to covalently conjugate carboxyl-containing molecules. Hydrophilic, stable in aqueous solutions, more stable when the amine groups are charged in mild acid pH. Functional Group: Primary amine (-NH<sub>2</sub>).

#### **Applications:**

- ✓ Anionic exchange resin.
- Caption, adsorption, isolation or purification of Nucleic acid.
- ✓ Adsorption of Biomolecules.
- Adsorption or isolation of Proteins.
- Immobilization of Enzymes by Crosslinking.

## CaxBeads<sup>™</sup> BetaCD

#### Ordering info:

Cat No.	Size
MP111	4 mL
MP112	10 mL

#### Description:

CaxBeads<sup>™</sup> BetaCD are ferromagnetic beads coated with terminal beta ciclodextrin groups on the surface of non-porous silica. Functional Group: β-ciclodextrin

## CaxBeads<sup>™</sup> Tris

#### Ordering info:

Cat No.	Size
MP121	4 mL
MP122	10 mL

#### Description:

CaxBeads<sup>™</sup> Tris is a cationic exchange resin to purify proteins based in a highly hydrophilic support due to the tris hydroxymethyl methane groups attached to the particles' surface.

Functional Group: Tris (Hidroxymethyl) amine methane.

## CaxBeads<sup>™</sup> Citrate

#### Ordering info:

Cat No.	Size
MP131	4 mL
MP132	10 mL

#### Description:

CaxBeads<sup>™</sup> Citrate is a cationic exchange resin with a high density of citric acid via chemisorption on non-porous silica surface. The beads are used to covalently conjugate primary amine-containing ligands via a stable amide bond. Functional Group: Carboxile/ Carboxilate.

#### Applications:

- Encapsulation of Hydrophobic molecules.
- Absorption and detection of molecules in biological samples.
- Refolding of proteins. Increase the solubility of low
- solubility compounds.

#### Applications:

- Cationic exchange resin.
- Caption, adsorption, isolation or purification of Nucleic acid.
- Adsorption of Biomolecules.
- Adsorption or isolation of Proteins.
- Immobilization by adsortion.Heavy Metal absorption such
- Ni<sup>+2</sup>, Co<sup>+2</sup>, Zn<sup>+2</sup>, Cu<sup>+2</sup>. ✓ Glycoproteins modified proteins
- purification.

#### Applications:

- Cationic exchange resin.Caption, adsorption, isolation or
- Capiton, adsorption, isolation of purification of Nucleic acid.
   Adsorption of Biomolecules.
- Adsorption or isolation of Proteins.
- Covalent immobilization of proteins.

# CaxBeads<sup>™</sup> Cyane

#### Ordering info:

Cat No.	Size
MP141	4 mL
MP142	10 mL

#### Description:

CaxBeads<sup>™</sup> Cyane are ferromagnetic beads coated with cyane groups on the surface of non-porous silica. Functional Group: Cyane (-CN)

#### Applications:

- Absorption of Hydrophobic molecules.
- Covalent inmobilization of proteins.

# CaxBeads<sup>™</sup> EpoxiLC

Cat No.	Size
MP151	4 mL
MP152	10 mL

#### Description:

CaxBeads<sup>™</sup> Epoxi LC are ferromagnetic beads coated with a large chain of epoxy/ oxirane on the surface of non-porous silica. The beads are used to covalently conjugate amine, sulfhydryl, or hydroxyl group-containing ligands. More preferable than CaxBeads<sup>™</sup> Epoxi SC to immobilize peptides. Functional Group: large chain epoxy/ oxirane.

#### Applications:

 Covalent immobilization of Biomolecules in mild conditions pH 5-9, temperature between 4-37° C.

# CaxBeads<sup>™</sup> EpoxiSC

#### Ordering info:

Cat No.	Size
MP161	4 mL
MP162	10 mL

#### Description:

CaxBeads<sup>™</sup> Epoxi SC are ferromagnetic beads coated with short chain of epoxy/ oxirane on the surface of non-porous silica. The beads are used to covalently conjugate amine, sulfhydryl, or hydroxyl group-containing ligands. More preferable than CaxBeads<sup>™</sup> Epoxi LC to immobilize higher proteins. Functional Group: short chain epoxy/ oxirane.

#### Applications:

 Covalent immobilization of Biomolecules in mild conditions pH 5-9, temperature between 4-37° C.

# ST SI BULK-80° C-20° C-4° C RT DI GP AT FAQS TIPS RE

# <u>Magnetic Particles</u>

# CaxBeads<sup>™</sup> Imidazol

#### **Ordering info:**

Cat No.	Size
MP171	4 mL
MP172	10 mL

# **CaxBeads<sup>™</sup> Oleic**

#### Ordering info:

Cat No.	Size
MP181	4 mL
MP182	10 mL

#### Description:

Description:

It has a non-porous silica surface and histidine functional groups in the surface adsorption at low pH (4-5) and desorption at neutral/alkaline pH 7-8. Functional Group: Thiol (-SH).

CaxBeads™ Oleic are ferromagnetic beads coated with oleic groups on the surface

of non-porous silica. This particles are hydrophobic and only soluble in organic

solvents as hexane, heptane, ciclohexane or dodecane Functional Group: Oleic acid (-CH<sub>3</sub>(CH<sub>2</sub>)<sub>7</sub>CH=CH(CH<sub>2</sub>)<sub>7</sub>COOH)

#### **Applications:**

- Cell sorting. Immunoprecipitation.
- Adsorption of Nucleic acid. ✓ Adsorption of Biomolecules.
- Adsorption or isolation of Proteins.
- Immobilization of Enzymes by Crosslinking.
- ✓ Transfection of gene vectors to culture cell.

#### **Applications:**

Hidrophobic molecules adsorption.

# **CaxBeads<sup>™</sup> Polyamine**

#### Ordering info:

Cat No.	Size
MP191	4 mL
MP192	10 mL

**Description:** It has a thick coverture of polyamine and a very high density of primary amines in the surface. The particles are hydrophilic, stable in aqueous solutions, more stables when the amine groups are charged in mild acid pH.

Functional Group: Primary (-NH<sub>2</sub>) and secondary amines (-NH).

#### **Applications:**

- ✓ Anionic exchange resin.
- Caption, adsorption, isolation or purification of Nucleic acid.
- ✓ Adsorption of Biomolecules.
- ✓ Adsorption or isolation of Proteins. Immobilization of Enzymes by
- Crosslinking.
- Gene vectors to culture cell Transfection.

# **CaxBeads<sup>™</sup> Thiol**

#### Ordering info:

Cat No.	Size
MP201	4 mL
MP202	10 mL

CaxBeads™ Thiol are ferromagnetic particles coated with thiol functional groups on the surface. The beads are used to reversibly couple thiol-containing ligands and are most suitable for conjugation of large proteins. Functional Group: Thiol (-SH).

#### **Applications:**

✓ Immobilization of Biomolecules in mild conditions pH 5-9, temperature between 4-37 °C.

# **CaxBeads<sup>™</sup> Thiosulfate**

#### Ordering info:

Cat No.	Size
MP211	4 mL
MP212	10 mL

# **CaxBeads<sup>™</sup> Tosyl**

#### **Ordering info:**

Cat No.	Size
MP221	4 mL
MP222	10 mL

Description:

Description:

Functional Group: Thiosulfate (-S2O32-)

Functional Group: Tosyl (CH<sub>3</sub>C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>-)

### **Applications:**

 Weak anionic exchange resin. Biomolecules affinity purification.

#### Applications: Cell sorting.

- Inmunoprecipitation.
- ✓ Purification for antibodies, proteins, peptides and DNA.

# **CaxBeads<sup>™</sup> Triazine**

#### Ordering info:

Cat No.	Size
MP231	4 mL
MP232	10 mL

## **Description:**

CaxBeads™ Triazine is used to easily conjugate covalently any ligand containing amino groups to the surface of the beads. Functional Group: Triazine chloride (-CICN)3

CaxBeads<sup>™</sup> Tosyl is used to covalently conjugate any ligand (e.g. antibody, protein,

peptide or glycoprotein) containing amino or sulfhydryl groups to the surface of the

beads. After coating them with a ligand with affinity for the protein to be isolated

(markers, receptors, enzymes), the resin can be used for protein purification.

#### Applications:

- Covalent immobilization of Biomolecules in mild conditions pH
- 5-9, temperature between 4-37 °C. Covalent immobilization of large molecules.
- ✓ Adsorption of Biomolecules

#### CaxBeads<sup>™</sup> Thiosulfate is a weak anionic resin with thiosulfate groups on surface. The beads allow the rapid release of very strong anions. These beads are specifically designed for easier and quicker fractionation of proteins/ peptides from complex

biological samples.

#### Description: