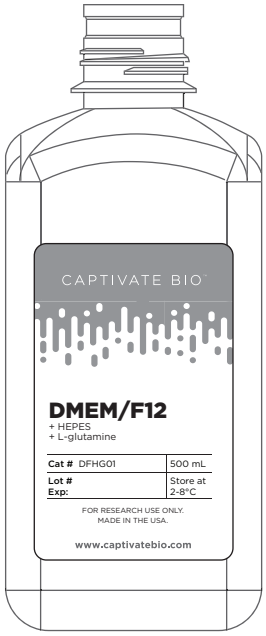
CAPTIVATE BIO™

DMEM/F12

with HEPES and L-glutamine



- High Quality Medium
- Made in the USA
- Reliable Formulation
- Customizable

High quality cell culture performance

Captivate Bio's DMEM/F12 Medium with HEPES is formulated for superior quality, reliability, and consistency for use in mammalian cell cultures. DMEM/F12 is a widely used serum-free, basal medium for supporting the growth of various stem cell cultures including human pluripotent, stem cells, induced pluripotent stem cells, human endothelial cells, and mouse embryonic stem cells.

This DMEM/F12 is modified as follows:

With	Without
• HEPES	• Phenol Red
• L-glutamine	
• Sodium Pyruvate	

Storage and handling

We recommend that this media be stored at 2-8°C and protected from light. This formulation uses a sodium bicarbonate buffer system and will require a 5–10% CO_2 environment to maintain physiological pH. Always use aseptic techniques when handling and supplementing cell culture media.

Product Information	CAT NO	QTY
DMEM/F12 Medium	DFHG01	500 mL
	DFHG02	1000 mL

* Custom formulations and bulk packaging available.

Quality Specifications			
Intended use	Mammalian cell culture, hPSCs, fibroblasts, human, mouse, rat, non-human primate, other cells.		
Glutamine	L-glutamine	**HEPES Buffer**	HEPES
Phenol Red Indicator	No Phenol Red	**Shelf-Life**	12 months from date of manufacture
pH	7.0-7.4	**Storage**	2-8° C
Osmolality	280-305 mOsm/kg	**Sterility**	Pass
Endotoxin	< 1.0 EU/mL	**Mycoplasma**	Not Detected

For more information, visit captivatebio.com, email orders@captivatebio.com, or contact us at (617) 607-4017.

DMEM/F12 with HEPES, with L-glutamine, without Phenol Red

Catalog Number(s): DFHG01, DFHG02

Components	Molecular Weight	mg/L	mM
Amino Acids			
Glycine	75	18.75	0.25
L-Alanine	89	4.45	0.05
L-Arginine hydrochloride	211	147.5	0.69905216
L-Asparagine-H2O	150	7.5	0.05
L-Aspartic acid	133	6.65	0.05
L-Cystine hydrochloride-H2O	176	17.56	0.09977272
L-Cystine 2HCl	313	31.29	0.09996805
L-Glutamic Acid	147	7.35	0.05
L-Glutamine	146	365	2.5
L-Histidine hydrochloride-H2O	210	31.48	0.14990476
L-Isoleucine	131	54.47	0.41580153
L-Leucine	131	59.05	0.45076334
L-Lysine hydrochloride	183	91.25	0.4986339
L-Methionine	149	17.24	0.11570469
L-Phenylalanine	165	35.48	0.2150303
L-Proline	115	17.25	0.15
L-Serine	105	26.25	0.25
L-Threonine	119	53.45	0.44915968
L-Tryptophan	204	9.02	0.04421569
L-Tyrosine disodium salt dihydrate	261	55.79	0.21375479
L-Valine	117	52.85	0.4517094
Vitamins			
Biotin	244	0.0035	1.43E-05
Choline chloride	140	8.98	0.06414285
Calcium D-pantothenate	477	2.24	0.00469602
Folic Acid	441	2.65	0.00600907
Niacinamide	122	2.02	0.01655738
Pyridoxine hydrochloride	206	2	0.00970874
Riboflavin	376	0.219	5.82E-04
Thiamine hydrochloride	337	2.17	0.00643917
Vitamin B12	1355	0.68	5.02E-04
i-Inositol	180	12.6	0.07

MEDIA FORMULATION

CAPTIVATE BIO™

Components	Molecular Weight	mg/L	mM
Inorganic Salts			
Calcium Chloride (CaCl2) (anhyd.)	111	116.6	1.0504504
Cupric sulfate (CuSO4-5H2O)	250	0.0013	5.20E-06
Ferric Nitrate (Fe(NO3)3"9H2O)	404	0.05	1.24E-04
Ferric sulfate (FeSO4-7H2O)	278	0.417	0.0015
Magnesium Chloride (anhydrous)	95	28.64	0.30147368
Magnesium Sulfate (MgSO4) (anhyd.)	120	48.84	0.407
Potassium Chloride (KCl)	75	311.8	4.1573334
Sodium Bicarbonate (NaHCO3)	84	1200	14.285714
Sodium Chloride (NaCl)	58	6995.5	120.61207
Sodium Phosphate dibasic (Na2HPO4) anhydrous	142	71.02	0.50014085
Sodium Phosphate monobasic (NaH2PO4-H2O)	138	62.5	0.45289856
Zinc sulfate (ZnSO4-7H2O)	288	0.432	0.0015
Other Components			
D-Glucose (Dextrose)	180	3151	17.505556
HEPES	238	3574.5	15.018908
Hypoxanthine Na	159	2.39	0.01503145
Linoleic Acid	280	0.042	1.50E-04
Lipoic Acid	206	0.105	5.10E-04
Putrescine 2HCl	161	0.081	5.03E-04
Sodium Pyruvate	110	55	0.5
Thymidine	242	0.365	0.00150826