



Selection Guide

DEDICATED TO WHAT MATTERS

At ANGUS Life Sciences, we are committed to delivering high-quality chemistries from the world's leading producers through a qualified, traceable and integrated supply chain. We promote consistency and sustainability in our processes by following a single Quality Management System applicable to all our biochemical, buffer and salt products. Our dedication to providing superior products and supply chain solutions for your R&D, scale-up and production needs is more than just an ongoing commitment at ANGUS Life Sciences. It's what we do.

	PRODUCT INFORMATION													APPLICATION	
The State of State							Compendia	cGMP	C00	CAS#	Formula			•	Downstream Protein Purification
Page Carparagine Anniyorous - Probable -	Hypoxanthine Sodium	145998	146001	-	146000	_	_		China	45738-97-4	C ₅ H3N ₄ NaO	158.11	⊘	⊘	
Figure Columnic	L-Asparagine Anhydrous	_	146039	_	149651	_	-	\odot	Italy	70-47-3	C ₄ H ₈ N ₂ O ₃	132.12	\odot	⊘	
February February	ಡ L-Asparagine Monohydrate	-	-	_	146052	_	FCC/EP	\odot	Italy	5794-13-8	C ₄ H ₁₀ N ₂ O ₄	150.13	\odot	\odot	
Tyrosine Disodium Salt Dihydrate - - 14668 146228 - - USA 122668-87-8 C _c H-No _c Na ₁ -2H _c O _c 261.19 ○ ○ ○	ַבְּיֵב L-Glutamine	_	-	215968*	_	_	_	\odot	Brazil	56-85-9	C ₅ H ₁₀ N ₂ O ₃	146.15	\odot	⊘	
Pyrvvle Acid Sodium	L-Glutamine	_	375711	375712	_	_	USP	\odot	Brazil	56-85-9	C ₅ H ₁₀ N ₂ O ₃	146.15	\odot	⊘	
Calcium Chloride Anhydrous - - 151948 - - ACS Japan 10043-62-4 CaC3 110.88 ∅ ∅ 0	L-Tyrosine Disodium Salt Dihydrate	_	-	149693	146228	_	-		USA	122666-87-9	C ₉ H ₉ NO ₃ Na ₂ •2H ₂ O	261.19	②	\odot	
Choline Chloride	Pyruvic Acid Sodium	_	234256	-	146418	_	_		China	113-24-6	C₃H₃NaO₃	110.04	⊘	⊘	
Choline Chloride	Calcium Chloride Anhydrous	-	-	151948	-	-	ACS		Japan	10043-52-4	CaCl ₂	110.98	⊘	⊘	
HEPES Sodium Salt 1	Choline Chloride	-	_	145761	_	_	FCC	\odot	USA	67-48-1	C ₅ H ₁₄ ClNO	139.62	⊘	\odot	⊘
HEPES Sodium Salt	Choline Chloride	_	149665	255861	_	_	USP	⊘	USA	67-48-1	C ₅ H ₁₄ ClNO	139.62	⊘	⊘	Ø
HEPES Sodium Salt	န္ HEPES	-	_	11092843	326736	_	_		USA	7365-45-9	C ₈ H ₁₈ N ₂ O ₄ S	238.30	\odot	\odot	\odot
HEPES Sodium Salt	HEPES Sodium Salt	-	145965	-	340802	_	-		USA	75277-39-3	C ₈ H ₁₇ N ₂ O ₄ SNa	260.28	\odot	\odot	\odot
Magnesium Chloride Anhydrous - - - - - 146245 - USA 7786-30-3 MgCl2 95.21 ⊘ ⊘ Magnesium Sulfate Anhydrous - - 149695 146254 - USP ⊘ Japan 7487-88-9 MgSO₄ 120.36 ⊘ ⊘ Potassium Chloride - - - 146479 - USP/EP ⊘ USA 7447-40-7 KCl 74.55 ⊘ ⊘ Sodium Phosphate Dibasic Anhydrous - - 146479 - 146478 ACS/USP ⊘ USA 7782-85-6 Na ₂ HPO₄ *7H₂O 268.07 ⊘ ⊘ Sodium Phosphate Monobasic Anhydrous - - 146491 - - USP ⊘ USA 7782-85-6 Na ₂ HPO₄ *7H₂O 268.07 ⊘ ⊘ Sodium Phosphate Monobasic Monohydrate - - 149713 ACS/USP ⊘ USA 10049-21-5 NaH₂PO₄ *H₂O 137.99<	ବ HEPES Sodium Salt	_	_	-	145972	_	_		China	75277-39-3	C ₈ H ₁₇ N ₂ O ₄ SNa	260.28	\odot	\odot	\odot
Sodium Phosphate Dibasic Heptahydrate - - 146491 - - 149713 ACS/USP ⊙ USA 10049-21-5 NaH₂PO₄·PH₂O 268.07 ⊙ ⊙ ⊙		_	-	-	_	146245	-		USA	7786-30-3	MgCl ₂	95.21	⊘	\odot	Ø
Sodium Phosphate Dibasic Heptahydrate - - 146491 - - 149713 ACS/USP ⊙ USA 10049-21-5 NaH₂PO₄·PH₂O 268.07 ⊙ ⊙ ⊙	ର୍ଷ୍ଣ Magnesium Sulfate Anhydrous	_	_	149695	146254	_	USP	⊘	Japan	7487-88-9	MgSO ₄	120.36	⊘	⊘	⊘
Sodium Phosphate Dibasic Heptahydrate - - 146491 - - 149713 ACS/USP ⊙ USA 10049-21-5 NaH₂PO₄·PH₂O 137.99 ⊙ ⊙	Potassium Chloride	-	-	-	252844	_	USP/EP	⊘	USA	7447-40-7	KCl	74.55	⊘	⊘	Ø
Sodium Phosphate Monobasic Anhydrous - - 146491 - - USP	Sodium Phosphate Dibasic Anhydrous	_	_	146479	_	146478	ACS/USP	⊘	USA	7558-79-4	Na ₂ HPO ₄	141.96	⊘	\odot	
Sodium Phosphate Monobasic Monohydrate - - - 149713 ACS/USP ⊙ USA 10049-21-5 NaH₂PO₄•H₂O 137.99 ⊙ ⊙	Sodium Phosphate Dibasic Heptahydrate	-	-	-	_	146486	ACS/USP	⊘	USA	7782-85-6	Na ₂ HPO ₄ •7H ₂ O	268.07	⊘	⊘	Ø
D-(+)-Biotin 145795	Sodium Phosphate Monobasic Anhydrous	_	_	146491	_	_	USP	⊘	USA	7558-80-7	NaH₂PO₄	119.98	⊘	⊘	Ø
Cyanocobalamin 255878 376046 - - - USP/EP	Sodium Phosphate Monobasic Monohydrate	-	-	-	-	149713	ACS/USP	⊘	USA	10049-21-5	NaH ₂ PO ₄ •H ₂ O	137.99	⊘		
Cyanocobalamin 255878 376046 - - - USP/EP ♥ China 68-19-9 C ₆₃ H ₈₈ CoN ₁₄ O ₁₄ P 1355.39 ♥	S D-(+)-Biotin	145795	- 15	_	_	_	USP/EP	⊘	China	58-85-5	C ₁₀ H ₁₆ N ₂ O ₃ S	244.31	⊘	⊘	
		255878	8 376046	-	_	_	USP/EP	⊘	China	68-19-9	C ₆₃ H ₈₈ CoN ₁₄ O ₁₄ P	1355.39	⊘	\odot	
Z Cyanocobalamin 146575 - - - - - USP ♥ China 68-19-9 C ₆₃ H ₈₈ CoN₁₄O₁₄P 1355.39 ♥	Cyanocobalamin	146575	75 –	_	_	_	USP	⊘	China	68-19-9	C ₆₃ H ₈₈ CoN ₁₄ O ₁₄ P	1355.39	⊘	⊘	
Cytidine	≦	254733	33 145789	-	-	-			Canada	65-46-3	C ₉ H ₁₃ N ₃ O ₅	243.22	∅	⊘	
Thymidine 146535 146536 Canada 50-89-5 C ₁₀ H ₁₄ N ₂ O ₅ 242.23	주 는 Thymidine	146535	146536	_	_	_	_		Canada	50-89-5	C ₁₀ H ₁₄ N ₂ O ₅	242.23	②	⊘	

FROM DISCOVERY TO LAUNCH

DISCOVER A BETTER WAY™ with ANGUS

ANGUS Life Sciences, a business of the ANGUS Chemical Company, provides dedicated support for multiple Life Sciences applications, including molecular, biotechnology and pharmaceutical. We offer specialized testing, custom blending and multiple packaging options to meet a wide variety of customer needs. **Discover how we can work with you to identify the optimal solutions for your organization.**



PACKAGING

- · cGMP IPEC-PQG
- Wide range of available packaging configurations



ANALYTICAL

- · ICP/MS
- · GC and HPLC
- ISO 9001: 2015 certified



WAREHOUSING

- · On-site storage options
- Ambient and controlled temperature capabilities



PURCHASING

- Formalized supplier qualification process
- Focus on sustainability
- · Non-animal origin

PRODUCT STEWARDSHIP

ANGUS encourages its customers to review their applications of ANGUS products from the standpoint of human health and environmental quality. To help ensure that ANGUS products are not used in ways for which they are not intended, ANGUS personnel will assist customers in dealing with environmental and product safety considerations. For assistance, product Safety Data Sheets, or other information, please visit **angus.com** or contact us at **info@angus.com**.



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