

cQrex® ingredients

Chemically defined peptides and antioxidant
for biopharma cell culture applications



1 Benefit from highly stable and soluble peptides

3 Increase cell viability and productivity

2 Enable concentrated media and pH-neutral feed

4 Enhance your bioprocess performance

A global partner to the pharma and biotech industry

Biopharmaceutical companies across the globe leverage our broad portfolio of high-quality ingredients and value-adding services in their production of therapeutic proteins like monoclonal antibodies, viral vectors, vaccines and therapeutic cells.

We address complex customer demands for high-quality and effective solutions by relying on our decades-long manufacturing experience and our commitment to innovation. Our biopharma specialists across Europe, the Americas and Asia provide customer support grounded in technical expertise and practical know-how.



Our offering: peptides and beyond



PEPTIDES

cGMP-quality peptides to overcome solubility and stability challenges of amino acids and reach higher cell productivity



ANTIOXIDANT

cQrex® AKG provides energy, protects cells against oxidative damage and stimulates cell growth



SERVICES

Media formulation, regulatory and application support with strong local market expertise

The cQrex® effect: enhanced cell culture performance

Tyrosine, cystine and glutamine are amino acids that are hardly soluble or unstable in cell culture media. These properties limit process performance, especially if highly concentrated feed or perfusion media are required to intensify the process.

cQrex® peptides from Evonik provide an elegant solution. Chemical coupling to carrier amino acids yields peptides that are stable and highly soluble at neutral pH. These natural building blocks are efficiently utilized by a variety of mammalian cells.

PRODUCT PROPERTIES

- Stable
- Soluble
- Bioavailable
- Non-animal-derived
- Chemically defined

PROCESS BENEFITS



Increased productivity

Highly-efficient production of biopharmaceuticals



Process intensification

Higher concentrations and smaller volumes



Process simplification

Reduced number of feeds and neutral pH

Curious? Order samples to test them in your system

When performance is of the essence, it helps to have the right tools available. The cQrex® portfolio consists of peptides and the keto acid AKG, which are designed to help manage the supply of critical nutrients by

improving their stability or solubility, in order to increase the cell productivity and ensure the efficient production of biopharmaceuticals. All products are readily available at commercial scale.

Overview of cQrex® ingredients

PRODUCT NAME	MOLECULAR WEIGHT	SOLUBILITY IN WATER (20 °C, pH 7)		SAMPLE QUANTITY
cQrex® AQ L-Alanyl-L-glutamine	217.23 g/mol	720 g/L	3314 mM	10 g
cQrex® GQ Glycyl-L-glutamine hydrate	221.23 g/mol	154 g/L	696 mM	10 g
cQrex® GY Glycyl-L-tyrosine dihydrate	274.27 g/mol	34 g/L	124 mM	10 g
cQrex® AY L-Alanyl-L-tyrosine trihydrate	306.31 g/mol	21 g/L	69 mM	10 g
cQrex® AC N,N'-di-L-Alanyl-L-cystine H ₂ O	400.48 g/mol	14 g/L	34 mM	6 g
cQrex® KC N,N'-di-L-Lys-L-CySS 2HCl H ₂ O	587.57 g/mol	>588 g/L	>1000 mM	10 g
cQrex® AKG Alpha-ketoglutaric acid	146.07 g/mol	>1000 g/L	>6846 mM	5 g

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