

RECOMBINANT TRYPSIN

CT-TRYP-GMP, CT-PTRYP-GMP



Introducing Recombinant Trypsin

Recombinant trypsin is expressed in *Pichia pastoris* using an artificially synthesised gene as a genetic construct. BBI's recombinant trypsin is:

- + >98% Pure
- + 100% Animal Origin Free (level 3)
- + Manufactured in a GMP certified facility
- + Available as a lyophilised powder or in liquid form
- + Shelf life validated for 2 years

Recommended storage for liquid is -15°C to -20°C and for powder is 2°C to 8°C.

Why choose Recombinant Trypsin for cell culture?

In cell culture trypsin is used to detach adherent cells from a culture surface. It can help to improve the efficiency of the cell dissociation process while preserving the structural and functional integrity of cell surface markers.

BBI's recombinant trypsin has been developed for use in biopharmaceutical manufacturing processes that require GMP grade materials including:

- + Cell culturing to cleave adherent cells
- + Stem cell, gene therapy and regenerative medicine
- + Proteomics to cleave specific amino acids
- + Vaccine manufacturing
- + Insulin and analogue manufacturing

Key Benefits

+ ANIMAL ORIGIN FREE

Recombinant DNA technology eliminates risk of viruses and other agents.

+ STABILITY

No loss of activity during transportation and storage.

+ HIGH PURITY

>98% Purity and contains no contaminating proteases such as Chymotrypsin, Carboxypeptidase B and Carboxypeptidase A.

+ SUITABLE FOR GMP CELL CULTURE

- Manufactured in GMP certified facility
- ISO 9001:2008
- For non-therapeutic use

+ VALIDATION

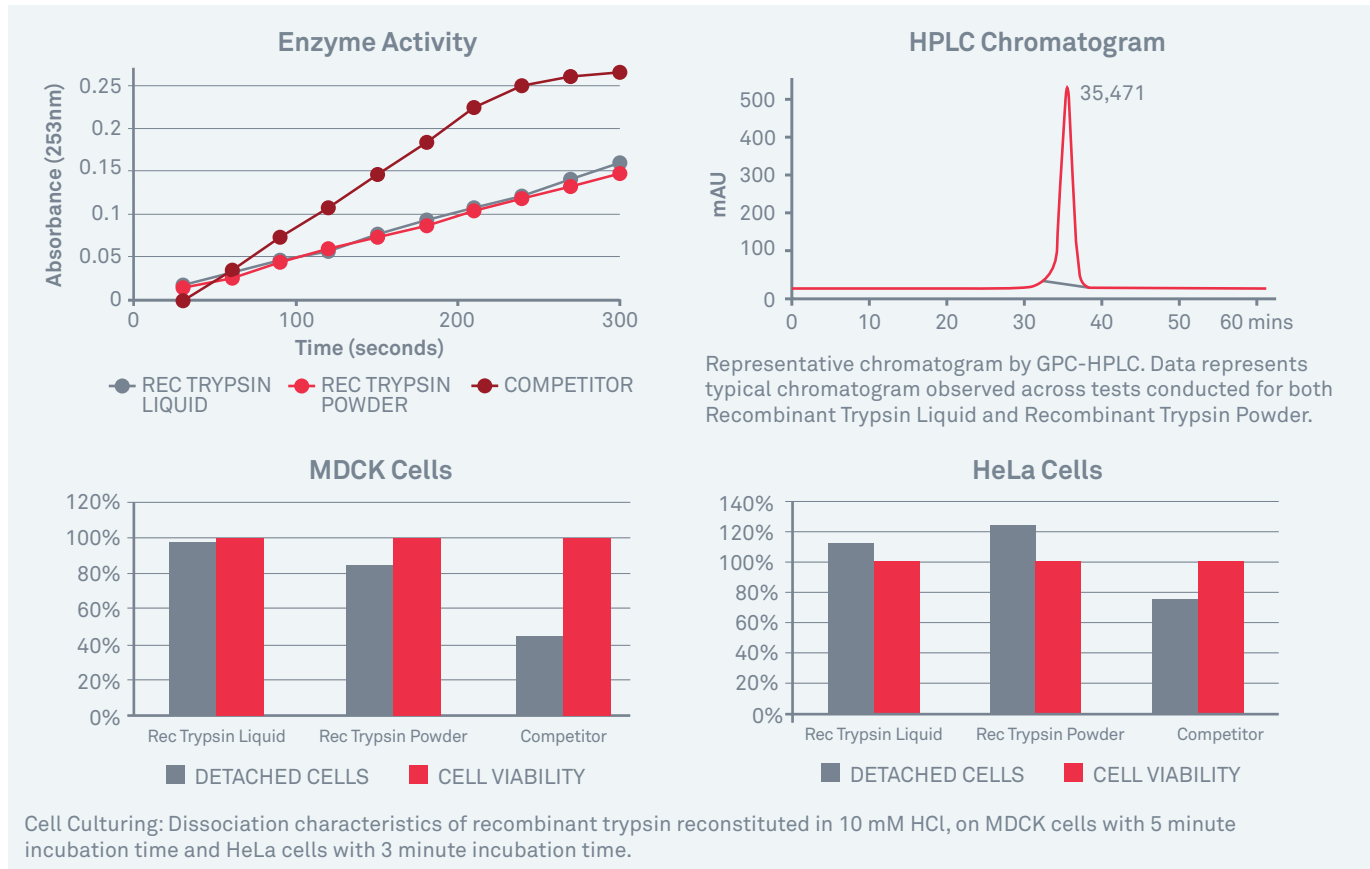
Study can be carried out for regulatory submission.

Order a sample today celladvance@bbisolutions.com Int: +44 (0) 2920 767 470

PERFORMANCE & CHARACTERISTICS

Enzyme activity using US Pharmacopeia BAEE method.

Trypsin activity	Rec Trypsin Liquid	Rec Trypsin Powder	Competitor
USP Units/mg	4913±253	4431±135	3455±178



CELL CULTURING

Dissociation characteristics of recombinant trypsin (powder) reconstituted in 1 X PBS w/o Ca²⁺ + 1 mM EDTA on MRC-5, Vero, and MDCK cells:

Cell line	MRC-5	Vero	MDCK
Cell culture media	MEM	VP-SFM	DMEM
Working concentration	0.05% w/grams of powder*		
Dissociation time (minutes)	3.21 ± 0.04	5.40 ± 0.12	6.14 ± 0.05

Dissociation times in T25 cm² flasks. Data is from triplicates. Cells were also visually inspected under a 4 X microscope after overnight incubation to check for morphological changes. * Note that optimal working concentrations depend on cell lines, buffer used for preparing working solution and other experimental conditions. 1 gram of powder contains ~ 0.6 grams of protein.

ORDERING DETAILS – USE THE FOLLOWING CODES WHEN ORDERING

Product	Code	Description
Recombinant trypsin	CT-TRYP-GMP	GMP Grade, Recombinant trypsin, Liquid format
Recombinant trypsin	CT-PTRYP-GMP	GMP Grade, Recombinant trypsin, Lyophilised format

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