

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	109-05
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 5.8 kDa, a single non-glycosylated polypeptide chain containing 51 amino acids.
Quantity:	5µg /20µg /1000µg
AA Sequence:	GLDFSQPFPS GFAVCSCK LGRGKCRKEC LENEKPDGNC RLNFLCCRQR I
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Testing in progress.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Endotoxin:	Less than 1.0 EU/µg of rHuBD-5 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C . Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Human Beta-defensin 5

Defensins (alpha & beta) are cationic peptides with a broad spectrum of antimicrobial activity that comprise an important arm of the innate immune system. The alpha-defensins are distinguished from the beta-defensins by the pairing of their three disulfide bonds. Six human beta-defensins have been identified, BD-1, BD-2, BD-3, BD-4, BD-5 and BD-6. Beta-defensins are expressed on some leukocytes and at epithelial surfaces. In addition to their direct antimicrobial activities, they can act as chemoattractants towards immature dendritic cells and memory T cells. Beta-defensins contain a six-cysteine motif that forms three intramolecular disulfide bonds. Recombinant human BD-5 is a 5.8 kDa protein containing 51 amino acid residues.