

# Recombinant Human Mammary Serine Protease Inhibitor (rHuMaspin)

## ChemWhat Technical Data Sheet (TDS)

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<b>Catalog Number:</b>	402-01
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 42.1 kDa, a single non-glycosylated polypeptide chain containing 375 amino acid residues.
<b>Quantity:</b>	5µg /20µg /1000µg
<b>AA Sequence:</b>	MDALQLANSA FAVDLFKQLC EKEPLGNVLF SPICLSTLS LAQVGAKGDT ANEIGQVLHF ENVKDIPFGF QTVTSDVNKL SSFYSLKLIK RLYVDKSLNL STEFISSTKR PYAKELETVD FKDKLEETKG QINNSIKDLT DGHFENILAD NSVNDQTKIL VVNAAYFVGK WMKKFPESET KECPFRLNKT DTKPVQMMNM EATFCMGNID SINCKIIEHP FQNKHLSMFI LLPKDVEDES TGLEKIEKQL NSESLSQWTN PSTMANAKVK LSIPKFKVEK MIDPKACLEN LGLKHIFSED TSDFSGMSET KGVALSNVIH KVCLEITEDG GDSIEVPGAR ILQHKDELNA DHPFIYIIRH NKTRNIFFG KFCSP
<b>Purity:</b>	> 95 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Data is not available.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
<b>Endotoxin:</b>	Less than 1 EU/µg of rHuMaspin as determined by LAL method.
<b>Reconstitution:</b>	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.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### ***Human Mammary Serine Protease Inhibitor***

Mammary serine protease inhibitor (Maspin), also known as serpin B5 is a non-inhibitory serpin that is encoded by the SERPINB5 gene in humans. The protein is expressed predominantly in normal mammary epithelial cells but at significantly reduced levels or absent in most breast carcinomas. As it does not undergo the S (stressed) to R (relaxed) conformational transition characteristic of active serpins, it exhibits no serine protease inhibitory activity. The maspin functions as tumor suppressor, blocking the growth, invasion, and metastatic properties of mammary tumors. This anti-tumor activity is achieved, in part, by the ability of maspin to inhibit angiogenesis and to preferentially promote apoptosis of tumor cells.

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