

## SERPINB5 Human

**Description:** SERPINB5 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 375 amino acids and having a molecular mass of 42.2 KDa. The SERPINB5 Human is purified by proprietary chromatographic techniques.

**Synonyms:** PI5, maspin, SERPINB5, serpin peptidase inhibitor clade B (ovalbumin) member 5, Serpin B5, Protease inhibitor 5.

**Source:** Escherichia Coli.

**Physical Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**Amino Acid Sequence:** MDALQLANSA FAVDLFKQLC EKEPLGNVLF SPICLSTSL  
LAQVGAKGDT ANEIGQVLHF ENVKDIPFGF QTVTSDVNKL SSFYSLKLIK RLYVDKSLNL  
STEFISSTKR PYAKELETVD FKDKLEETKG QINNSIKDLT DGHFENILAD NSVNDQTKIL  
VVNAAYFVGK WMKKFPESET KECPFRLNKT DTKPVQMMNM EATFCMGNID SINCKIIELP  
FQNKHLSMFI LL

**Purity:** Greater than 97.0% as determined by (a) Analysis by HPLC. (b) Analysis by SDS-PAGE.

**Formulation:**

Lyophilized from a 0.2

**Stability:**

Lyophilized SERPINB5 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution SERPINB5 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Usage:**

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

**Solubility:**

It is recommended to reconstitute the lyophilized SERPINB5 in sterile 18M-cm H<sub>2</sub>O not less than 100

**Introduction:**

SERPINB5 (Maspin) is a tumor suppressor protein of the serine proteinase inhibitor family. Maspin plays a vital role in embryonic development through critical functions in cell adhesion. In addition, Maspin is present in normal breast and prostatic epithelial cells although down regulated in the particular carcinomas. SERPINB5 impedes the growth, invasion, and metastatic properties of mammary tumors as well as the invasive ability of pancreatic ductal adenocarcinoma cells.

SERPINB5 being a breast tumor suppressor gene is a significant marker of the disease progression in breast neoplasms. Furthermore, high expression of maspin is linked to squamous cell carcinoma in non-small-cell lung cancer. Moreover, maspin expression has been directly linked with the biological aggressiveness of ovarian carcinoma. Maspin exhibits no serine protease inhibitory activity since it does not undergo the stressed to relaxed conformational transition typical of active serpins.

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