

## Maspin, Human

**Cat. No.:** Z03231-1

**Size:** 1.0 mg

**Synonyms:** Serpin B5, PI-5

### Description:

Maspin is a non-inhibitory member of the serpin superfamily, a group of 40-60 kDa serine protease inhibitors. Maspin was discovered in 1994 and has been identified in prostate, thymus, testis, intestine, tongue, and lung. Recently Maspin received a great deal of attention due to its potential apoptotic role in cancers. Maspin expression predicts a better prognosis for several types of carcinomas including breast, prostate, colon, and oral squamous cell carcinoma. The level of Maspin is also inversely correlated to VEGF-A, an angiogenic factor. Researchers found that Maspin may play its apoptotic role as an endogenous inhibitor of histone deacetylase I (HDAC I). Therefore, Maspin is a potential personalized marker of Non-Small Cell Lung Carcinoma (NSCLC).

Recombinant human Maspin (rhMaspin) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 375 amino acids. rhMaspin has a molecular mass of 42.1 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Amino Acid Sequence:

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00001 MDALQLANSA FAVDLFKQLC EKEPLGNVLF SPICLSTSL S
00041 LAQVGAKGDT ANEIGQVLHF ENVKDIPFGF QTVTSDVNKL
00081 SSFYSLKLIK RLYVDKSLNL STEFISSTKR PYAKELETVD
00121 FKDKLEETKG QINNSIKDLT DGHFENILAD NSVNDQTKIL
00161 VVNAAYFVGK WMKKFPESET KECPFRLNKT DTKPVQMMNM
00201 EATFCMGNID SINCKIIELP FQNKHLSMFI LLPKDVEDES
00241 TGLEKIEKQL NSESLSQWTN PSTMANAKVK LSIPKFKVEK
00281 MIDPKACLEN LGLKHIFSED TSDFGMSET KVALSNVIH
00321 KVCLEITEDG GDSIEVPGAR ILQHKDELNA DHPFIYIIRH
00361 NKTRNIIFFG KFCSP
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**Source:** *E. coli*

**Species:** Human

**Biological Activity:** Data not available.

**Molecular Weight:** 42.1 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O at 100 µg/mL.

**Purity:** > 95% by SDS-PAGE and HPLC analysis.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant human Maspin (rhMaspin) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhMaspin remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.