Recombinant SPB5 protein (His tag)

Catalog Number	539927
Synonyms	Maspin; Peptidase inhibitor 5; PI-5
Species	Human
Expression System	E. coli
Accession	P36952
Molecular Weight	Predictes a molecular mass of 43.76 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	1-375
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-375 aa (P36952) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Serpin B5 (Maspin) Fragment (1-375) from Homo sapiens, a stable and soluble protein unit designed for structural and biochemical studies. This fragment retains key domains of the tumor suppressor, enabling research into its role in inhibiting tumor growth, invasion, and metastasis without serine protease inhibitory activity. Serpin B5, also known as Maspin or Peptidase inhibitor 5 (PI-5), is a tumor suppressor protein in humans that blocks the growth, invasion, and metastatic properties of mammary tumors. Unlike typical serpins, it does not undergo the S to R conformational transition and lacks serine protease inhibitory function. It is localized in the secreted extracellular space, where it contributes to its anti-tumor effects. The full-length protein's significance lies in its potential as a therapeutic target for cancer research, given its ability to impede key processes in tumor progression.