

Recombinant Human Trefoil Factor 3 (Human TFF3)

Product Information

Product Name	Cat#	Size
Recombinant Human Trefoil Factor 3 (Human TFF3)	92565ES08	5 µg
	92565ES60	100 µg
	92565ES76	500 µg

Product Description

Trefoil Factor 3 (TFF3), also known as Intestinal Trefoil Factor (ITF) and P1.B, is one of three structurally related secreted proteins that contain trefoil domains. Trefoil factor 2 belongs to the trefoil factor family that consists of three members named TFF1, TFF2 and TFF3. They are characterized by having at least one copy of the trefoil motif, a 40-amino acid domain that contains three conserved disulfides. TFF-3 is expressed by goblet cells and in the uterus, and has also been shown to express in certain cancers, including colorectal, hepatocellular, and in biliary tumors. It involves in the maintenance and repair of the intestinal mucosa, also promotes the mobility of epithelial cells in healing processes. TFF3 up-regulation is associated with and enhances tumor cell invasion and metastasis. It supports hypoxia-induced VEGF up-regulation in tumor cells and also promotes angiogenesis in non-tumor environments. Over-expression of TFF3 in type 2 diabetic mouse liver has been shown to improve glucose tolerance and insulin sensitivity.

Product Properties

Synonyms	Intestinal Trefoil Factor, hITF, Polypeptide P1.B, hP1.B
Accession	Q07654
GeneID	7033
Source	E.coli-derived human TFF3 protein, Glu36-Phe94.
Molecular Weight	Approximately 13.2 kDa.
AA Sequence	EEYVGLSANQ CAVPAKDRVD CGYPHVTPE CNNRGCCFDS RIPGVPWCFK PLQEAECTF
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	>97% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a chemotaxis bioassay using human MCF-7 cells is less than 10 µg/mL, corresponding to a specific activity of > 100 IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	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 and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!