

Human Thrombomodulin, extracellular domain, sequence modified (recombinant)

Description:

InVivo offers a recombinant form of the **extracellular domain** of **Human Thrombomodulin** which is produced under serum-free conditions in HEK 293 (human embryonic kidney) cells. The expression construct contains **residues 1 to 515** of UniProt entry [P07204](#): **M406L, S492A**.

The **M406L substitution** (M388L in the mature protein) leads to a Thrombomodulin variant that **resists oxidative inactivation** [1]. The **S492A substitution** (Ser474 in the mature protein) removes an *O*-glycosylation site for chondroitin sulfate, a glycosaminoglycan (GAG) that increases anticoagulant activity [2, 3].

The recombinant protein is produced under serum-free conditions in optimized HEK293-cell system and purified through one-step purification with ion exchange chromatography.

Product-ID:	RP_SZ_160
Expression System:	Mammalian; HEK
Protein Accession Number:	UniProt: P07204
Amino Acids:	Met1–Ser515 (Extracellular Domain of Thrombomodulin)
Mutations:	M406L, S492A
Mature Protein N-Term:	Ala19 (predicted)
Tag:	none
Expected Molecular Weight:	52 kDa (<i>runs at 60-85 kDa on SDP-PAGE under reducing conditions</i>)
Formulation:	Liquid, 25 mM sodiumacetate, 150 mM sodiumchloride, 0.01 % Tween® 80, pH 6.0
Concentration:	≥ 1.0 mg/ mL
Purity:	-/-

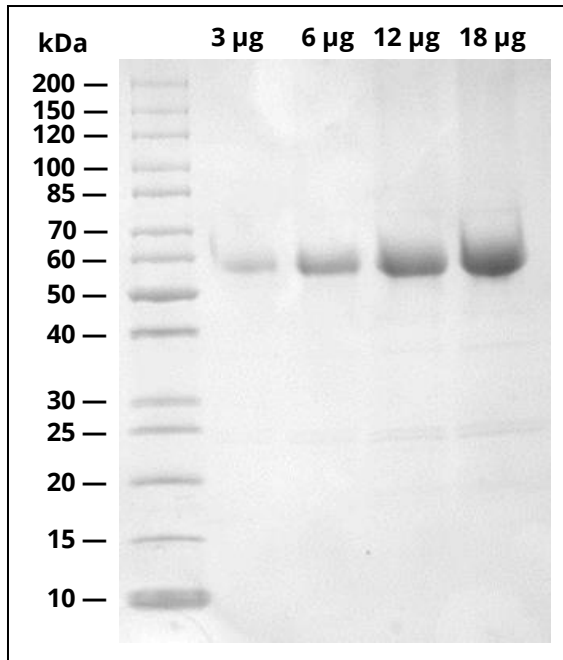
The product is for research use or for further manufacturing only.

Literature:

- [1] C. B. Glaser et al., "Oxidation of a specific methionine in thrombomodulin by activated neutrophil products blocks cofactor activity. A potential rapid mechanism for modulation of coagulation" J Clin Invest, vol. 90, no. 6, pp. 2565-73, 1992. PMID: [1334978](#)
- [2] J. F. Parkinson et al., "Recombinant human thrombomodulin. Regulation of cofactor activity and anticoagulant function by a glycosaminoglycan side chain" Biochem J, vol. 283, no. 1, pp. 151-7, 1992. PMID: [1314561](#)
- [3] T. Edano et al., "Increased anticoagulant activity of recombinant thrombomodulin modified with glycosaminoglycan" Biol Pharm Bull., vol. 21, no. 4, pp. 375-81, 1998. PMID: [9586576](#)

Human Thrombomodulin, extracellular domain, sequence modified (recombinant) — Supplementary Data

SDS-PAGE:



SDS-PAGE, 4–20 % Tris-Glycine.
Non-Reducing conditions, Coomassie-stained.