

For Research Use Only

Recombinant Human TIMP2 protein (hFc Tag)



Catalog Number: Eg0418

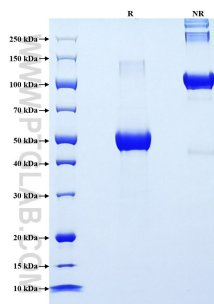
Basic Information	Species: Human	Purity: >90 %, SDS-PAGE	Tag: hFc Tag
Technical Specifications	Purity: >90 %, SDS-PAGE Endotoxin Level: <0.1 EU/µg protein, LAL method Source: HEK293-derived Human TIMP2 protein Cys27-Pro220 (Accession# P16035) with a human IgG1 Fc tag at the C-terminus. GeneID: 7077 Accession: P16035 Predicted Molecular Mass: 47.8 kDa SDS-PAGE: 45-55 kDa, reducing (R) conditions Formulation: Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.		
Biological Activity	Not tested		
Storage and Shipping	Storage: It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. • Until expiry date, -20°C to -80°C as lyophilized proteins. • 3 months, -20°C to -80°C under sterile conditions after reconstitution. Shipping: The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.		
Reconstitution	Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.		
Background	TIMP2, a 21-kDa protein, is a member of the family of matrix metalloproteinase inhibitors, which contains four members (TIMP1, TIMP2, TIMP3, and TIMP4). Tissue inhibitors of metalloproteinases (TIMPs) are multifaceted molecules that exhibit properties beyond their classical proteinase inhibitory function. TIMP-2 is the only TIMP functioning as both an MMP inhibitor and an activator, because it can interact with membrane type 1 MMP and pro-MMP2 to facilitate the activation of pro-MMP2 to its active form. TIMP2 can regulate many physiological progression such as tumor growth, metastasis, and angiogenesis through matrix metalloproteinases (MMPs). TIMP2 knockout resulted in constitutive MMP9 activation abundantly and adverse MI remodeling in vivo.		
References	1. Stetler-Stevenson WG et al. (2008) Sci Signal.1(27):re6. 2. Hernandez-Barrantes S et al. (2000) J Biol Chem.275(16):12080-9. 3. Seo DW et al. (2003) Cell.114(2):171-80. 4. Kandam V et al. (2010) Circ Res.106(4):796-808.		
Synonyms	TIMP2, TIMP-2, CSC 21K, CSC-21K, Metalloproteinase inhibitor 2		

For technical support and original validation data for this product please contact

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Purity of Recombinant Human TIMP2 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.