Human Integrin alpha 2b beta 3 (ITGAIIb&ITGB3) Heterodimer Protein, His Tag&Tag Free

Catalog # IT3-H52W8



Synonym

Integrin alpha 2b beta 3,ITGAIIb&ITGB3

Source

Human ITGAIIb&ITGB3 Heterodimer Protein, His Tag&Tag Free(IT3-H52W8) is expressed from human 293 cells (HEK293). It contains AA Leu 32 - Arg 993 (ITGAIIb) & Gly 27 - Asp 718 (ITGB3) (Accession # P08514-1 (ITGAIIb) & P05106-1 (ITGB3)).

Predicted N-terminus: Leu 32 (ITGAIIb) & Gly 27 (ITGB3)

Molecular Characterization

R887L		
ITGAIIb (Leu 32 - Arg 993) P08514-1	Acidic Tail	Poly-his
ITGB3 (Gly 27 - Asp 718) P05106-1	Basic Tail	

Human ITGAIIb&ITGB3 Heterodimer Protein, His Tag&Tag Free, produced by co-expression of ITGAIIb and ITGB3, has a calculated MW of 111.4 kDa (ITGAIIb) and 81.8 kDa (ITGB3). Subunit ITGAIIb is fused with an acidic tail at the C-terminus and followed by a polyhistidine tag and subunit ITGB3 contains no tag but a basic tail at the C-terminus. The non-reducing (NR) protein migrates as 115-130 kDa (ITGAIIb) and 85-92 kDa (ITGB3) respectively due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

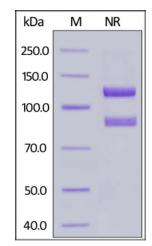
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human ITGAIIb&ITGB3 Heterodimer Protein, His Tag&Tag Free on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



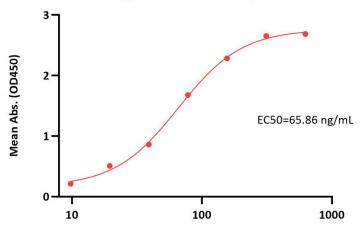
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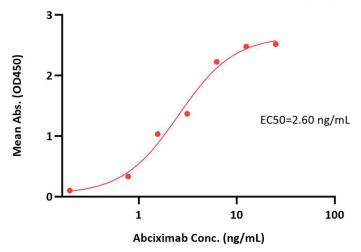
Human ITGAIIb&ITGB3 Heterodimer Protein, His Tag&Tag Free ELISA 0.2 μg of Human Fibronectin per well



Human ITGAIIb&ITGB3 Heterodimer Protein, His Tag&Tag Free Conc. (ng/mL)

Immobilized Human Fibronectin at 2 μg/mL (100 μL/well) can bind Human ITGAIIb&ITGB3 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT3-H52W8) with a linear range of 2-78 ng/mL (QC tested).

Human ITGAIIb&ITGB3 Heterodimer Protein, His Tag&Tag Free ELISA 0.1µg of Human ITGAIIb&ITGB3 Heterodimer Protein, His Tag&Tag Free per well



Immobilized Human ITGAIIb&ITGB3 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT3-H52W8) at 1 μg/mL (100 μL/well) can bind Abciximab with a linear range of 0.8-6 ng/mL (Routinely tested).

Background

Integrin alpha IIb beta 3 exist in a conformational equilibrium clustered around four main states. These conformations range from a compact bent nodule to two partially extended intermediate conformers and finally to a fully upright state. Activation of blood platelets by physiological stimuli at sites of vascular injury induces inside-out signaling, resulting in a conformational change of the prototype Integrin alpha IIb beta 3 from an inactive to an active state competent to bind soluble fibrinogen. Furthermore, ligand occupancy of Integrin alpha IIb beta 3 outside-in signaling and additional conformational changes of the receptor, leading to the exposure of extracellular neoepitopes termed ligand-induced binding sites (LIBS), which are recognized by anti-LIBS monoclonal antibodies.

Clinical and Translational Updates

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

