

Datasheet

Human TGF-beta RII / TGFBR2 Protein, Fc Tag

Catalog # TG2-H5252

For Research Use Only

Description

Source Human TGF-beta RII, Fc Tag (TG2-H5252) is expressed from human 293 cells (HEK293). It contains AA Thr 23 - Asp 159 (Accession # NP_003233). Predicted N-terminus: Thr 23

Predicted N-terminus Thr 23

Protein Structure

TGFBR2(Thr 23 - Asp 159) NP_003233	Fc(Pro 100 - Lys 330) P01857
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Molecular Characterization This protein carries a human IgG1 Fc tag at the C-terminus. The protein has a calculated MW of 42 kDa. The protein migrates as 55-66 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin Less than 1.0 EU per µg by the LAL method.

Purity >95% as determined by SDS-PAGE.

Formulation and Storage

Formulation Lyophilized from 0.22 µm filtered solution in 50 mM tris, 100 mM glycine, pH7.5. Normally trehalose is added as protectant before lyophilization.

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.

No activity loss was observed after storage at:

- 4-8°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

Background

Background TGF-beta receptor type-2 (TGFBR2 or TGFR-2) is also known as TGF-beta type II receptor, Transforming growth factor-beta receptor type II, TbetaR-II, TGFβR2, which is a homodimer or heterohexamer, belongs to the protein kinase superfamily, TKL Ser/Thr protein kinase family and TGFB receptor subfamily. TGFR2 / TGFBR2 binds TGF-β1 / TGFB1 and TGF-β3 / TGFB3 with high affinity and TGF-β2 / TGFB2 with a much lower affinity. This type II receptor forms a heterodimeric complex with type I receptor and is essential for signal transduction. Upon ligand binding, the TGFR2 autophosphorylates its cytoplasmic domain and subsequently phosphorylates the downstream molecules which then enter the nucleus and regulate the transcription of a subset of genes related to cell proliferation.

- References**
- (1) Wieser R., et al., 1995, EMBO J. 14:2199-2208.
 - (2) Deep S., et al., 2003, Biochemistry 42:10126-10139.
 - (3) Groppe J., et al., 2008, Mol. Cell 29:157-168.

Please contact us at TechSupport@acrobiosystems.com, if you have any questions about this product.

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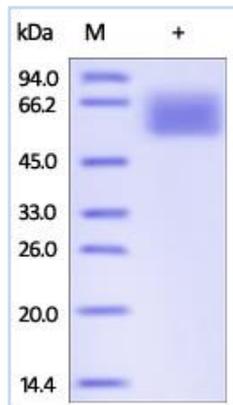
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Assay Data

SDS-PAGE Data



Human TGF-beta RII, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.