

Recombinant Rhesus monkey TGFB2 Protein, His&avi tagged, Biotinylated

Cat. No. TGFB2-4503RB **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotinylated recombinant Cynomolgus monkey TGFB2 Protein (24-184 aa) with His&avi tag was expressed in HEK293.
Species	Rhesus monkey
Source	HEK293
ProteinLength	24-184 aa
Conjugation/Label	Biotin
Description	Transmembrane serine/threonine kinase forming with the TGF-beta type I serine/threonine kinase receptor, TGFB1, the non-promiscuous receptor for the TGF-beta cytokines TGFB1, TGFB2 and TGFB3. Transduces the TGFB1, TGFB2 and TGFB3 signal from the cell surface to the cytoplasm and is thus regulating a plethora of physiological and pathological processes including cell cycle arrest in epithelial and hematopoietic cells, control of mesenchymal cell proliferation and differentiation, wound healing, extracellular matrix production, immunosuppression and carcinogenesis. The formation of the receptor complex composed of 2 TGFB1 and 2 TGFB2 molecules symmetrically bound to the cytokine dimer results in the phosphorylation and the activation of TGFRB1 by the constitutively active TGFB2. Activated TGFB1 phosphorylates SMAD2 which dissociates from the receptor and interacts with SMAD4. The SMAD2-SMAD4 complex is subsequently translocated to

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the nucleus where it modulates the transcription of the TGF-beta-regulated genes. This constitutes the canonical SMAD-dependent TGF-beta signaling cascade. Also involved in non-canonical, SMAD-independent TGF-beta signaling pathways.

Molecular Mass	21 kDa
AASequence	IPPHVQKSDVEMEAQKGEMICPSCNRTAHPLRHINNDMMVTDNNGAVKFPQLCKFC DVRFSTCDNQKSCLSNCSITSICEKPQEVCAVWRKNDENITLETVCHDPKLPYHDFI LEDAASPKCIMKEKKKPGETFFMCSCSSDECNDNIIFSEEYNTSNPDHHHHHHHHGL NDIFEAQKIEWHE
Endotoxin	<1 EU/μg by LAL
Purity	> 95% by SDS-PAGE
Storage	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Concentration	0.75 mg/mL by BCA
Storage Buffer	Sterile PBS, pH7.4
Labeling efficiency	0.93 By HABA

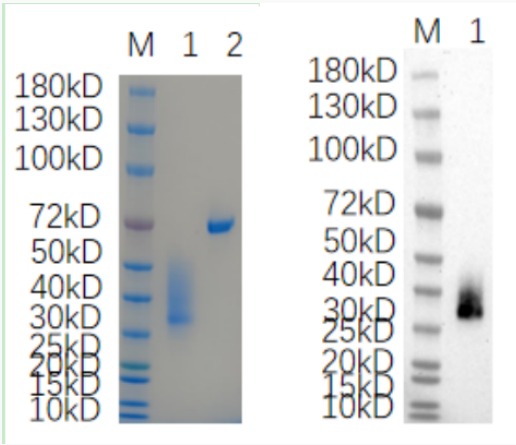
GENE INFORMATION

Gene Name	TGFB2 transforming growth factor beta receptor 2 [Macaca mulatta (Rhesus monkey)]
Official Symbol	TGFB2

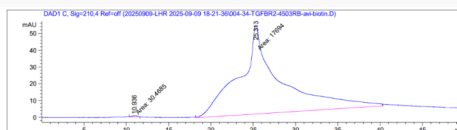
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Synonyms	TGFBR2; transforming growth factor beta receptor 2; TGF-beta receptor type-2; transforming growth factor, beta receptor II (70/80kDa); EC 2.7.11.30
Gene ID	703088
mRNA Refseq	NM_001261151
Protein Refseq	NP_001248080
UniProt ID	H9YUL0
SDS-PAGE and WB	 Reducing 4%-20% SDS-PAGE (CBB stained) and WB (Anti-His Mouse Monoclonal Antibody) analysis profiles of purified TGFBR2. 1. TGFBR2: 1 µg 2. BSA: 1 µg

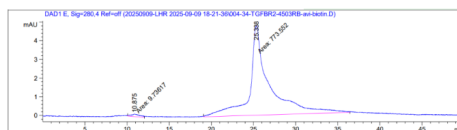
SEC-HPLC analysis profiles of purified TGFR2.



Signal 1: DAD1 C, Sig=210,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	10.936	MM	0.7587	30.46849	6.69334e+1	0.1719
2	25.313	MM	5.5904	1.76940e4	52.75117	99.8281

Totals : 1.77244e4 53.42051



Signal 2: DAD1 E, Sig=280,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	10.875	MM	1.1999	9.73617	1.35236e+1	1.2430
2	25.338	MM	2.6894	773.55176	4.79389	98.7570

Totals : 783.28793 4.92913

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