

ARG81882 Human TGF beta Receptor 2 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81882-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81882-002	Standard	2 X 10 ng/vial	4°C
ARG81882-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81882-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81882-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81882-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81882-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81882-008	25X Wash buffer	20 ml	4°C
ARG81882-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81882-010	STOP solution	10 ml (Ready to use)	4°C
ARG81882-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81882 Human TGF beta Receptor 2 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human TGF beta Receptor 2 in serum, plasma (heparin, EDTA) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	TGF beta Receptor 2
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	7.8 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.
Standard Range	15.6 - 1000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 5.3%; Inter-Assay CV: 6.0%
Alternate Names	FAA3; AAT3; TbetaR-II; TGF-beta receptor type-2; LDS2B; MFS2; TGF-beta type II receptor; EC 2.7.11.30; TAAD2; TGFR-2; LDS2; Transforming growth factor-beta receptor type II; TGFbeta-RII; TGF-beta receptor type II; RIIC; LDS1B

Application Instructions

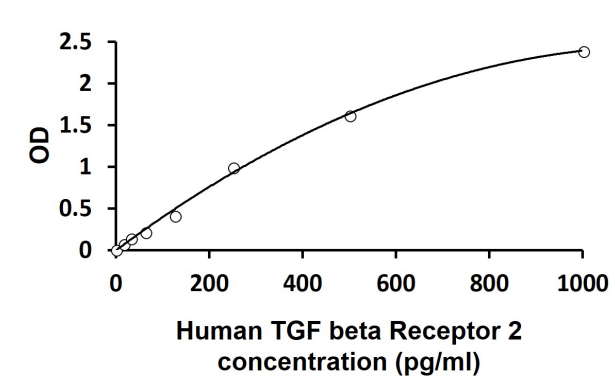
Assay Time	~ 5 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TGFR2
Gene Full Name	transforming growth factor, beta receptor II (70/80kDa)
Background	This gene encodes a member of the Ser/Thr protein kinase family and the TGFB receptor subfamily. The encoded protein is a transmembrane protein that has a protein kinase domain, forms a heterodimeric complex with another receptor protein, and binds TGF-beta. This receptor/ligand complex phosphorylates proteins, which then enter the nucleus and regulate the transcription of a subset of genes related to cell proliferation. Mutations in this gene have been associated with Marfan Syndrome, Loeys-Deitz Aortic Aneurysm Syndrome, and the development of various types of tumors. Alternatively spliced transcript variants encoding different isoforms have been characterized. [provided by RefSeq, Jul 2008]
Function	Transmembrane serine/threonine kinase forming with the TGF-beta type I serine/threonine kinase receptor, TGFR1, 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 TGFR1 and 2 TGFR2 molecules symmetrically bound to the cytokine dimer results in the phosphorylation and the activation of TGFR1 by the constitutively active TGFR2. Activated TGFR1 phosphorylates SMAD2 which dissociates from the receptor and interacts with SMAD4. The SMAD2-SMAD4 complex is subsequently translocated to 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. [UniProt]
Highlight	Related products: TGF beta Receptor antibodies ; TGF beta Receptor ELISA Kits ; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
PTM	Phosphorylated on a Ser/Thr residue in the cytoplasmic domain. [UniProt]



ARG81882 Human TGF beta Receptor 2 ELISA Kit standard curve image

ARG81882 Human TGF beta Receptor 2 ELISA Kit results of a typical standard run with optical density reading at 450 nm.