Rat Transforming growth Factor β 1 (TGF- β 1) ELISA Kit

SAB Signalway Antibody

Catalog No: #EK7055

Package Size: #EK7055-1 48T #EK7055-2 96T

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Description

Product Name	Rat Transforming growth Factor β1 (TGF-β1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (Rattus norvegicus)
Other Names	CED; DPD1; LAP; TGFB; TGFbeta; TGF-beta 1 protein latency-associated peptide
Accession No.	P17246
Uniprot	P17246
GeneID	59086;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5%
	within the expiration date under appropriate storage condition.
	The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days,
	and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China
	Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage
	at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:Request Information
Sensitivity:Request Information
Sample Type:Serum, Plasma, Other biological fluids
Sample Volume: 1-200 μL
Assay Time:1-4.5h
Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate TGFB1 in samples. An antibody specific for TGFB1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTGFB1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TGFB1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of TGFB1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:TGF-β is capable of producing a variety of effects and virtually all cell types respond to this factor in some way. The inappropriate presence of active TGF-β1 has been implicated in a variety of pathological conditions Because of the necessity for regulating its activity tightly, TGF-β is secreted by cells in the form of an inactive complex. This complex consists of TGF-β1 associated non-covalently with a protein designated the latency associated peptide (LAP).

TGF- β 1 and LAP represent components of a pro-peptide that is cleaved in a post-golgi compartment prior to secretion. LAP and TGF- β 1 each consist of a disulfide-linked homodimer and the association of these two components renders TGF- β 1 inactive and inaccessible to anti-TGF- β antibodies.

References

mmune-defensive microspheres promote regeneration of the nucleus pulposus by targeted entrapment of the inflammatory cascade during intervertebral disc degeneration In Bioact Mater on 2024 Mar 20 by Liang Zhou, Feng Cai et al..PMID: 38549774, (2024)

Note: This product is for in vitro research use only