

ARG83803

arigoQIK® Mammal TGF Beta 1 ELISA Development Kit

Package: 1 kit(5 plates), 1 kit
(15 plates)
Store at: 4°C, -20°C

Summary

Product Description

ARG83803 arigoQIK® Mammal TGF Beta 1 ELISA Development Kit, includes Capture antibody, Detection antibody, Standard, and HRP-Streptavidin Solution.
This ELISA Development Kit is designed for the development of sandwich ELISA to measure Mammal TGF Beta 1 in Serum, plasma and cell culture supernatants.

For other reagents required for [arigoQIK® ELISA Development Kit](#), please refer [ARG83524 Integral Reagent Kit \(ELISA Development Kit\)](#)

More about arigoQIK®:

- Optimized capture and detection antibody pairs
- Reduced incubation time and wash cycles
- 2-hour quicker than conventional ELISA process
- 5- and 15-plate packages available

Tested Reactivity

Mamm

Tested Application

ELISA

Target Name

TGF beta

Conjugation

HRP

Conjugation Note

Substrate: TMB and read at 450 nm.

Sensitivity

39.06 pg/ml

Sample Type

Serum, plasma and cell culture supernatants.

Standard Range

78.13 - 5000 pg/ml

Sample Volume

50 µL

Alternate Names

TGFB; DPD1; TGFbeta; CED; Transforming growth factor beta-1; LAP; TGF-beta-1

Properties

Storage instruction

Store components at 4°C or -20°C. 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

TGFB1

Gene Full Name

transforming growth factor, beta 1

Background

This gene encodes a member of the transforming growth factor beta (TGFB) family of cytokines, which are multifunctional peptides that regulate proliferation, differentiation, adhesion, migration, and other functions in many cell types. Many cells have TGFB receptors, and the protein positively and negatively regulates many other growth factors. The secreted protein is cleaved into a latency-associated peptide (LAP) and a mature TGFB1 peptide, and is found in either a latent form composed of a TGFB1 homodimer, a LAP homodimer, and a latent TGFB1-binding protein, or in an active form composed of a TGFB1 homodimer. The mature peptide may also form heterodimers with other TGFB family members.

This gene is frequently upregulated in tumor cells, and mutations in this gene result in Camurati-Engelmann disease.[provided by RefSeq, Oct 2009]

Function

Multifunctional protein that controls proliferation, differentiation and other functions in many cell types. Many cells synthesize TGF β 1 and have specific receptors for it. It positively and negatively regulates many other growth factors. It plays an important role in bone remodeling as it is a potent stimulator of osteoblastic bone formation, causing chemotaxis, proliferation and differentiation in committed osteoblasts. Can promote either T-helper 17 cells (Th17) or regulatory T-cells (Treg) lineage differentiation in a concentration-dependent manner. At high concentrations, leads to FOXP3-mediated suppression of RORC and down-regulation of IL-17 expression, favoring Treg cell development. At low concentrations in concert with IL-6 and IL-21, leads to expression of the IL-17 and IL-23 receptors, favoring differentiation to Th17 cells. [UniProt]

Highlight

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PTM

Glycosylated.
The precursor is cleaved into mature TGF- β 1 and LAP, which remains non-covalently linked to mature TGF- β 1 rendering it inactive.