

## Human TGF-beta2 ELISA Kit | TGFB2 elisa kit

TGF-beta2 (Human) OmniKine ELISA Kit

CATALOG #  
**AAA315751**

REACTIVITY  
**Human**

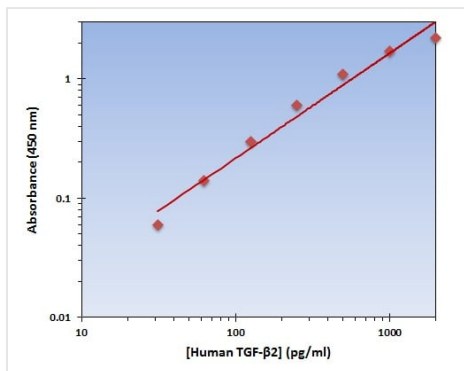
### PRODUCT SYNONYMS

TGF-beta2; TGF-beta2 (Human) OmniKine ELISA Kit; Transforming growth factor beta-2; BSC-1 cell growth inhibitor; Cetermin; Glioblastoma-derived T-cell suppressor factor; Polyergin; TGFB2 elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                     |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity              | Human                                                                                                                                                                                                                                               |
| Specificity             | The OmniKine™ Human TGF-beta2 ELISA is capable of recognizing both recombinant and naturally produced Human TGF-beta2 proteins. The antigens listed below were tested at 50 ng/ml and did not exhibit significant cross reactivity or interference. |
| Form/Format             | 12 x 8-Well Microstrips                                                                                                                                                                                                                             |
| Sequence Length         | 442                                                                                                                                                                                                                                                 |
| Assay Type              | Quantitative Sandwich                                                                                                                                                                                                                               |
| Preparation and Storage | Store entire kit at 4 degree C until use.                                                                                                                                                                                                           |

### IMAGES



#### Application Data

The OmniKine Human TGF-beta2 ELISA Kit allows for the detection and quantification of endogenous levels of natural and/or recombinant Human TGF-beta2 proteins within the range of 32-2000 pg/ml.

## ADDITIONAL INFORMATION

### Related Product Information for TGFB2 elisa kit

Principle of the Assay: The OmniKine™ Human TGF-beta2 ELISA Kit contains the components necessary for quantitative determination of natural or recombinant Human TGF-beta2 concentrations within any experimental sample including cell lysates, serum and plasma. This particular immunoassay utilizes the quantitative technique of a "Sandwich" Enzyme-Linked Immunosorbent Assay (ELISA) where the target protein (antigen) is bound in a "sandwich" format by the primary capture antibodies coated to each well-bottom and the secondary detection antibodies added subsequently by the investigator. The capture antibodies coated to the bottom of each well are specific for a particular epitope on Human TGF-beta2 while the user-added detection antibodies bind to epitopes on the captured target protein. Amid each step of the procedure, a series of wash steps must be performed to ensure the elimination of non-specific binding between proteins to other proteins or to the solid phase. After incubation and "sandwiching" of the target antigen, a peroxidase enzyme is conjugated to the constant heavy chain of the secondary antibody (either covalently or via Avidin/Streptavidin-Biotin interactions), allowing for a colorimetric reaction to ensue upon substrate addition. When the substrate TMB (3, 3', 5, 5'-Tetramethylbenzidine) is added, the reaction catalyzed by peroxidase yields a blue color that is representative of the antigen concentration. Upon sufficient color development, the reaction can be terminated through addition of Stop Solution (2 N Sulfuric Acid) where the color of the solution will turn yellow. The absorbance of each well can then be read by a spectrophotometer, allowing for generation of a standard curve and subsequent determination of protein concentration.

Background/Introduction: TGF-beta 2 has suppressive effects on interleukin-2 dependent T-cell growth. 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 by transducing their signal through combinations of transmembrane type I and type II receptors (TGFB1 and TGFB2) and their downstream effectors, the SMAD proteins. Disruption of the TGFB/SMAD pathway has been implicated in a variety of human cancers. The encoded protein is secreted and has suppressive effects of interleukin-2 dependent T-cell growth. Translocation t (1; 7) (q41; p21) between this gene and HDAC9 is associated with Peters' anomaly, a congenital defect of the anterior chamber of the eye. The knockout mice lacking this gene show perinatal mortality and a wide range of developmental, including cardiac, defects. Alternatively spliced transcript variants encoding different isoforms have been identified.

## NCBI AND UNIPROT INFORMATION

|                                  |                                                |
|----------------------------------|------------------------------------------------|
| NCBI GI #                        | 208022653                                      |
| NCBI GeneID                      | 7042                                           |
| NCBI Accession #                 | NP_001129071.1                                 |
| NCBI GenBank Nucleotide #        | NM_001135599.3                                 |
| UniProt Accession #              | P61812; P08112; Q15579; Q15581; Q4VAV9; B4DKC5 |
| Molecular Weight                 | 50,573 Da                                      |
| NCBI Official Full Name          | transforming growth factor beta-2 isoform 1    |
| NCBI Official Synonym Full Names | transforming growth factor beta 2              |
| NCBI Official Symbol             | TGFB2                                          |
| NCBI Official Synonym Symbols    | LDS4; G-TSF; TGF-beta2                         |
| NCBI Protein Information         | transforming growth factor beta-2              |
| UniProt Protein Name             | Transforming growth factor beta-2              |
| UniProt Gene Name                | <b>TGFB2</b>                                   |
| UniProt Synonym Gene Names       | TGF-beta-2; G-TSF; LAP                         |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.