

## TGF beta 1 Rabbit monoclonal antibody

Catalog: MB66279

Host: Rabbit

Reactivity: Human, Mouse, Rat

### BackGround:

Transforming growth factor- $\beta$  (TGF- $\beta$ ) superfamily members are critical regulators of cell proliferation and differentiation, developmental patterning and morphogenesis, and disease pathogenesis. TGF- $\beta$  elicits signaling through three cell surface receptors: type I (RI), type II (RII), and type III (RIII). Type I and type II receptors are serine/threonine kinases that form a heteromeric complex. In response to ligand binding, the type II receptors form a stable complex with the type I receptors allowing phosphorylation and activation of type I receptor kinases. The type III receptor, also known as betaglycan, is a transmembrane proteoglycan with a large extracellular domain that binds TGF- $\beta$  with high affinity but lacks a cytoplasmic signaling domain. Expression of the type III receptor can regulate TGF- $\beta$  signaling through presentation of the ligand to the signaling complex. The only known direct TGF- $\beta$  signaling effectors are the Smad family proteins, which transduce signals from the cell surface directly to the nucleus to regulate target gene transcription.

There are three TGF-beta family members, designated TGF- $\beta$ 1, TGF- $\beta$ 2, and TGF- $\beta$ 3, which are encoded by distinct genes and are expressed in a tissue specific manner. TGF- $\beta$  proteins are synthesized as precursor proteins that are cleaved and reassembled in association with other proteins to form latent complexes. Activation occurs by proteolytic release of TGF- $\beta$  monomers, which dimerize to form the mature TGF- $\beta$  ligands.

### Product:

Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA.

### Molecular Weight:

~ 45 kDa

### Swiss-Prot:

P01137

### Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

### Applications:

WB (1/500 - 1/1000)

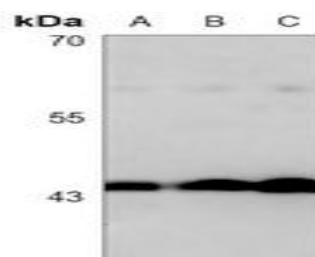
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

Recognizes endogenous levels of TGF beta 1 protein.

### DATA:



Western blot analysis of TGF beta 1 expression in Raw264.7 (A), Jurkat (B), C6 (C) whole cell lysates.

### Note:

For research use only, not for use in diagnostic procedure.

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