## TGF beta1 Ab

Cat.#: BF0173 Concn.: 1mg/ml Mol.Wt.: 45kDa
Size: 50ul,100ul,200ul Source: Mouse Clonality: Monoclonal

Application: ELISA 1/10000, WB 1/500 - 1/2000

Reactivity: Human

Purification: Affinity-chromatography.

Specificity: TGF beta1 Ab detects endogenous levels of total TGF beta1.

Immunogen: Purified recombinant fragment of human TGF beta1

expressed in E. Coli.

Uniprot: P01137

Description: TGF beta(transforming growth factor beta), with 390-amino

acid protein (about 43 kDa), is a multifunctional peptide that controls proliferation, differentiation, and other functions in many cell types. In mammals, three isoforms of TGFbeta, that is, beta1, beta2,and beta3,are known. TGF beta is one of numerous inhibitory factors produced by cancer cells that regulate antitumor immunity. TGF beta1 takes part in the local response in the course of primary lung cancer and TGFbeta1 is thought to be implicated in breast cancer progression.TGFbeta1 also plays a critical role in the downregulation of microglial responses minimizing brain inflammation and thus avoiding exacerbation of brain

damage.

Subcellular Location: Secreted > extracellular space > extracellular matrix.

Tissue Specificity: Highly expressed in bone. Abundantly expressed in articular

cartilage and chondrocytes and is increased in osteoarthritis

(OA). Colocalizes with ASPN in chondrocytes within OA

lesions of articular cartilage.

Similarity: The 'straitjacket' and 'arm' domains encircle the growth

factor monomers and are fastened together by strong bonding between Lys-56 and Tyr-103/Tyr-104. Activation of TGF-beta1 requires the binding of integrin alpha-V to an RGD sequence in the prodomain and exertion of force on this domain, which is held in the extracellular matrix by latent TGF-beta binding proteins. The sheer physical force unfastens the straitjacket and releases the active growth factor dimer (By similarity).Belongs to the TGF-beta family.

Storage Condition and

Buffer:

Mouse IgG1 in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50%



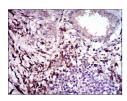
## **Affinity Biosciences**

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glycerol. Store at -20 °C. Stable for 12 months from date of receipt.



Western blot analysis using TGF beta1 mouse mAb against truncated TGF beta1 recombinant protein.



IHC analysis of paraffin-embedded human pancreas cancer tissue, using TGF beta1 Ab at 1:100.

<code>IMPORTANT:</code> For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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