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TGFb1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1733a

Product Information

Application	WB, IHC, FC, E
Primary Accession	P01137
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	7F6
Isotype	IgG1
Calculated MW	44325
Description	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
Immunogen	Purified recombinant fragment of human TGFb1 (AA: 62-195) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	7040
Other Names	Transforming growth factor beta-1, TGF-beta-1, Latency-associated peptide, LAP, TGFB1, TGFB
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TGFb1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TGFB1 (HGNC:11766)
Synonyms	TGFB
Function	Transforming growth factor beta-1 proprotein: Precursor of the Latency-associated peptide (LAP) and Transforming growth factor beta-1 (TGF-beta-1) chains, which constitute the regulatory and active subunit of TGF-beta-1, respectively.
Cellular Location	[Latency-associated peptide]: Secreted, extracellular space, extracellular matrix
Tissue Location	Highly expressed in bone (PubMed:11746498, PubMed:17827158). Abundantly expressed in articular cartilage and chondrocytes and is increased in osteoarthritis (OA) (PubMed:11746498, PubMed:17827158). Colocalizes with ASPN in chondrocytes within OA lesions of articular cartilage (PubMed:17827158)

References

1.Cell. 2011 Oct 28;147(3):565-76. 2.Kobe J Med Sci. 2011 May 11;56(6):E242-52.

Images

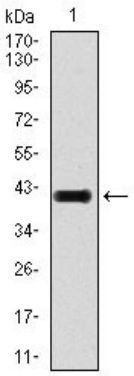


Figure 1: Western blot analysis using TGFb1 mAb against human TGFb1 recombinant protein. (Expected MW is 41 kDa)

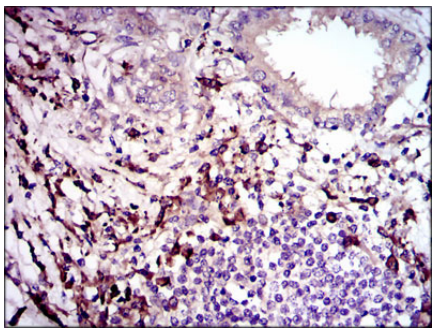


Figure 2: Immunohistochemical analysis of paraffin-embedded lung cancer tissues using TGFb1 mouse mAb with DAB staining.

Figure 3: Immunohistochemical analysis of paraffin-embedded lymphoid tissue tissues using TGFb1 mouse mAb with DAB staining.

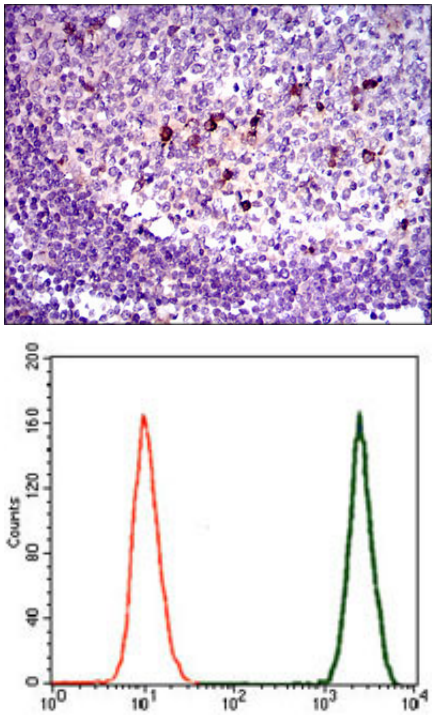


Figure 4: Flow cytometric analysis of A549 cells using TGFb1 mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.