

Mouse Anti-Transforming Growth Factor (TGF) beta 1/TGFβ1 [3C11]: MC0590, MC0590RTU7

Intended Use: For Research Use Only

Description: Transforming growth factor betas (TGFβs) belong to the TGF-β superfamily of cytokines that play a critical role in regulating cell proliferation and differentiation, developmental patterning and morphogenesis, and disease pathogenesis. Three TGFβs have been identified. TGF-β1, TGF-β2, and TGF-β3 are encoded by distinct genes and are expressed in a tissue specific manner. TGF-β proteins are synthesized as precursor proteins that are cleaved and reassembled in association with other proteins to form latent complexes. TGFβ1 is highly expressed in bone. It controls proliferation, differentiation and other functions in many cell types. Many cells synthesize TGFβ1 and have specific receptors for it. Defects in TGFβ1 are the cause of Camurati-Engelmann disease (CE) also known as progressive diaphyseal dysplasia 1 (DPD1). CE is an autosomal dominant disorder characterized by hyperostosis and sclerosis of the diaphyses of long bones. The disease typically presents in early childhood with pain, muscular weakness and waddling gait, and in some cases other features such as exophthalmos, facial paralysis, hearing difficulties and loss of vision.

Specifications:

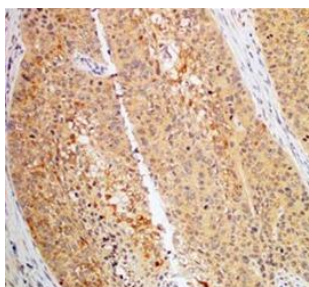
Clone:	3C11
Source:	Mouse
Isotype:	IgG1k
Reactivity:	Human, mouse, rat
Immunogen:	Recombinant human TGFβ1 protein
Localization:	Secreted
Formulation:	Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Applications:	IHC, ICC/IF, WB
Package:	

Description	Catalog No.	Size
TGFβ1 [3C11] Concentrated	MC0590	1 ml
TGFβ1 [3C11] Prediluted	MC0590RTU7	7 ml

IHC Procedure*:

Positive Control Tissue:	Thrombocytosis tissue, colon, spleen
Concentrated Dilution:	25-200
Pretreatment:	Tris EDTA pH9.0 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human ESCC stained with anti-TGFβ1 using DAB

References:

1. Runt related transcription factor-1 plays a central role in vessel co-option of colorectal cancer liver metastases. Rada, M. et al. Commun Biol. 4: 950, 2021.
2. MicroRNA-181a promotes epithelial-mesenchymal transition in esophageal squamous cell carcinoma via the TGF-β/Smad pathway. Run Xu, et al. Mol Med Rep. May; 23(5): 316, 2021.