



TGFA Polyclonal Antibody

E90337

Catalog Number: E90337**Amount:** 100ul

Background: Transforming growth factor alpha (TGF-alpha) is a member of the epidermal growth factor (EGF) family, sharing the same receptor, EGFR, and regulating cell proliferation, survival, and differentiation (1). Members of the family share an EGF-like domain of 45-60 amino acids characterized by the conservation of six regularly spaced cysteins, forming three disulfide bonds that function as their receptor binding domain. TGF-alpha was initially discovered in the media of retrovirally transformed fibroblasts, and its name comes from its ability to induce transformation in cultured fibroblasts (2). This transforming activity was later shown to require TGF-beta, which potentiates the activity of TGF-alpha through a separate receptor (3). Soluble TGF-alpha is released from its membrane-bound precursor, pro-TGF-alpha, following proteolytic cleavage, but the membrane bound precursor is still able to bind and activate EGFR (4). Binding of soluble or membrane bound TGF-alpha to EGFR leads to receptor dimerization, tyrosine autophosphorylation, and activation of downstream signaling components. TGF-alpha and related peptides play an important role in the progression of cancer as well as in neuropathological processes (5,6).

Species: Rabbit**Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Synonyms: TFGA; Pro-TGF-alpha; TGF-alpha**Immunogen:** Recombinant protein of human TGFA**Purification:** Affinity purification**Reactivity:** H M R**Applications:** WB IHC**Molecular Weight:** 17kDa**Swiss-Prot No.:** P01135**Gene ID:** 7039

References: 1. Deryck, R. (1986) J. Cell Biochem. 32, 203-204. 2. de Larco, J.E. and Tordaro, G.J. (1978) Proc. Natl. Acad. Sci. USA 75, 4001-4005. 3. Roberts, A. B. et al. (1981) Proc. Natl. Acad. Sci. USA 78, 5339-5343. 4. Wong, S. T. et al. (1989) Cell 56, 495-506. 5. Rusch, V. et al. (1996) Cytokine Growth Factor Rev. 7, 133-141. 6. Junier, M.P. (2000) Prog. Neurobiol. 62, 443-473.

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