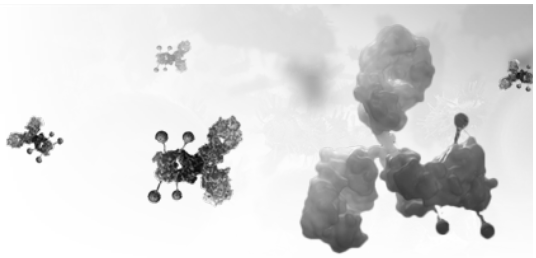

Anti-TGFB3 polyclonal antibody [Biotin] (DPABY-420)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	Transforming Growth Factor Beta 1, 2, and 3 (TGF-beta 1, TGF-beta 2, and TGF-beta 3) are highly pleiotropic cytokines that virtually all cell types secrete. TGF-beta molecules are proposed to act as cellular switches that regulate processes such as immune function, proliferation, and epithelial-mesenchymal transition. Targeted deletions of these genes in mice show that each TGF-beta isoform has some non-redundant functions: TGF-beta 1 is involved in hematopoiesis and endothelial differentiation; TGF-beta 2 affects development of cardiac, lung, craniofacial, limb, eye, ear, and urogenital systems; and TGF-beta 3 influences palatogenesis and pulmonary development. The full range of in vitro biological activities of TGF-beta 5 has not yet been explored. However, TGF-beta 1, TGF-beta 2, TGF-beta 3, and TGF-beta 5 have been found to be largely interchangeable in an inhibitory bioassay, and it is anticipated that TGF-beta 5 will show a spectrum of activities similar to the other TGF-beta family members. To date, the production of TGF-beta 5 has only been demonstrated in Xenopus.TGF-beta ligands are initially synthesized as precursor proteins that undergo proteolytic cleavage. The mature segments form active ligand dimers via a disulfide-rich core consisting of the characteristic 'cysteine knot'. TGF-beta signaling begins with binding to a complex of the accessory receptor betaglycan (also known as TGF-beta RIII) and a type II serine/threonine kinase receptor termed TGF-beta RII. This receptor then phosphorylates and activates a type I serine/threonine kinase receptor, either ALK-1 or TGF-beta RI (also called ALK-5). The activated type I receptor phosphorylates and activates Smad proteins that regulate transcription. Use of other signaling pathways that are Smad-independent allows for distinct actions observed in response to TGF-beta in different contexts.
Specificity	Detects TGF-beta 3 in ELISAs and Western blots.In sandwich immunoassays,less than 0.1% cross-reactivity with recombinant human (rh) TGF-beta 1, rhTGF-beta 1.2,and rhTGF-beta 2 is observed.
Immunogen	S. frugiperda insect ovarian cell line Sf 21-derived recombinant chicken TGF-beta 3 and recombinant human TGF-beta 3

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Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Purification	Antigen Affinity-purified
Conjugate	Biotin
Applications	Western Blot, ELISA Detection (Matched Pair)
Format	Liquid
Size	50 µg
Buffer	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein.
Preservative	None
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

GENE INFORMATION

Gene Name	TGFB3 transforming growth factor, beta 3 [Homo sapiens (human)]
Official Symbol	TGFB3
Synonyms	TGFB3; transforming growth factor, beta 3; ARVD; RNHF; ARVD1; TGF-beta3; transforming growth factor beta-3; TGF-beta-3; prepro-transforming growth factor beta-3;
Entrez Gene ID	7043
Protein Refseq	NP_003230
UniProt ID	A5YM40
Chromosome Location	14q24
Pathway	ALK1 signaling events; Amoebiasis; Cell cycle; Chagas disease (American trypanosomiasis); Chronic myeloid leukemia; Colorectal cancer; Cytokine-cytokine receptor interaction; Dilated cardiomyopathy;
Function	growth factor activity; identical protein binding; protein binding; contributes_to protein binding;

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protein heterodimerization activity; transforming growth factor beta binding; type I transforming growth factor beta receptor binding; type II transforming

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