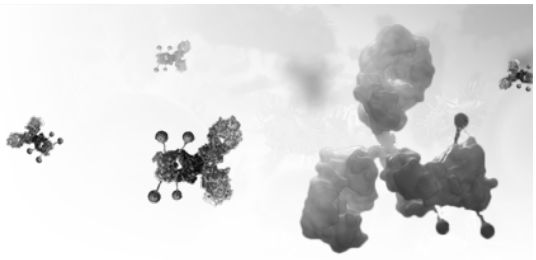

Mouse Anti-bovine TGF-β Monoclonal antibody, clone 1D11.16.8 (CABT-L4301)

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

PRODUCT INFORMATION

Product Overview	The 1D11.16.8 monoclonal antibody reacts with mouse, human, rat, monkey, hamster, canine and bovine TGF-β (transforming growth factor beta) isoforms 1, 2 and 3.
Target	Mouse/Human/Rat/monkey/hamster/canine/bovine TGF-β
Immunogen	Bovine TGFβ isoform 2
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Human, Mouse, Rat, Monkey, Hamster, Canine, Bovine
Clone	1D11.16.8
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo TGFβ neutralization, in vitro TGFβ neutralization, WB
Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]

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	Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	The 1D11.16.8 monoclonal antibody reacts with mouse, human, rat, monkey, hamster, canine and bovine TGF-β (transforming growth factor beta) isoforms 1, 2 and 3. TGF-β is a multifunctional cytokine that regulates the proliferation of epithelial cells, endothelial cells, fibroblasts, neurons, lymphoid cells including T lymphocytes and NK cells, and other hematopoietic cell types. TGF-β also regulates the activities of activated macrophages and the development of regulatory T cells. Additionally, TGF-β plays roles in immune function, tissue remodeling and wound repair. TGF-β exists as five highly similar isoforms (TGF-β 1-5) with homologies of 70-80%. TGF-β1 is synthesized by the enzymatic cleavage of a long precursor TGF-β1 polypeptide encoded by the TGFB1 gene which yields the mature protein and the Latency Associated Peptide (LAP). The LAP and mature TGF-β1 non-covalently associate during secretion. TGF-β is ubiquitously expressed by many cell types including macrophages and platelets which express high levels of TGF-β. TGF-β signaling has been shown to plays roles in cancer, autoimmune diseases, asthma, heart disease, and diabetes. Its importance is illustrated by TGF-β knockout mice which show defects in hematopoiesis and endothelial differentiation, and die of overwhelming inflammation. The 1D11.16.8 monoclonal antibody is a neutralizing antibody.
Keywords	CED;Diaphyseal dysplasia 1 progressive;DPD 1;DPD1;LAP;Latency-associated peptide;TGF beta 1 antibody;TGF beta;TGF beta1;TGF beta2

GENE INFORMATION

Official Symbol	Transforming growth factor beta
Synonyms	CED; Diaphyseal dysplasia 1 progressive; DPD 1; DPD1; LAP; Latency-associated peptide; TGF beta 1 antibody; TGF beta; TGF beta1; TGF beta2
References	Komai, T., et al. (2018). "Transforming Growth Factor-beta and Interleukin-10 Synergistically Regulate Humoral Immunity via Modulating Metabolic Signals." Front Immunol 9: 1364. PubMed;Tai, N., et al. (2013). "TLR9 deficiency promotes CD73 expression in T cells and diabetes protection in nonobese diabetic mice." J Immunol 191(6): 2926-2937.

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