

Human IgD Recombinant Rabbit mAb

Catalog # AP98643

Product Information

Application	IHC-P, IHC-F, IF
Reactivity	Human
Host	Rabbit
Clonality	Recombinant
Calculated MW	42 KDa
Physical State	Liquid
Purity	affinity purified by Protein A
Buffer	0.01M TBS(pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 3 Ig-like (immunoglobulin-like) domains.
SUBUNIT	Immunoglobulin (Ig) molecules consist of two chains, one heavy chain (which can be alpha, delta, epsilon, gamma or mu) and one light chain (which can be kappa or lambda) each consisting of a variable and a constant region. An IgD molecule contains thus a delta heavy chain combined with either a kappa or a lambda light chains. Kappa light chains are found predominantly on the membrane IgD (mIgD) form and lambda on the secreted IgD (sIgD) form, this fact is poorly understood. Membrane-bound IgD molecules are non-covalently associated with a heterodimer of CD79A and CD79B.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Ig delta chain C region is an allelic product of the human IGHD gene. The two known IGHD alleles, IGHD*01 and IGHD*02, respectively produce isoforms 1, a secreted protein, and 2, a single-pass type I membrane protein. A member of the adaptive immune system, IgD antibodies are monomers expressed by activated B cells. Containing 3 Ig-like (immunoglobulin-like) domains, IgD chain C is located on chromosome 14 within the human heavy chain locus, lying on the 3' side of the IgM chain C region from the V-D-J cassette. Polyadenylation at certain sites along the heavy chain locus likely effects the mechanism that determines the alternative splicing event which results in the expression of either IgD chain C or IgM chain C. Some studies have suggested that antigenic coactivation of IgD+ B cells can have a negative influence on bone resorption during infectious events.

Additional Information

Other Names	IGHD_HUMAN; IGHD; Ig delta chain C region; Ig delta chain C region NIG-65; Ig delta chain C region WAH; immunoglobulin heavy constant delta; immunoglobulin delta; constant region of heavy chain of IgD
Dilution	IHC-P=1:50-200,IHC-F=1:50-200,IF=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Name	Human IgD Recombinant Rabbit mAb
Function	IgD is the major antigen receptor isotype on the surface of most peripheral B-cells, where it is coexpressed with IgM. The membrane-bound IgD (mIgD) induces the phosphorylation of CD79A and CD79B by the Src family of protein tyrosine kinases. Soluble IgD (sIgD) concentration in serum below those of IgG, IgA, and IgM but much higher than that of IgE. IgM and IgD molecules present on B cells have identical V regions and antigen-binding sites. After the antigen binds to the B-cell receptor, the secreted form sIgD is shut off. IgD is a potent inducer of TNF, IL1B, and IL1RN. IgD also induces release of IL6, IL10, and LIF from peripheral blood mononuclear cells. Monocytes seem to be the main producers of cytokines in vitro in the presence of IgD.

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