10320 Camino Santa Fe, Suite A
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Tel: 858.875.1900 Fax: 858.875.1999

IgD

Mouse Monoclonal antibody(Mab)
Catalog # AD80324

Specification

IgD - Product info

Application	**IHC-P**
Primary Accession	P01880
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**47500**

IgD - Additional info

Gene Name	**IGHD {ECO:0000303|PubMed:11340299, ECO:0000303|Ref.15}**

Other Names
Immunoglobulin heavy constant delta {ECO:0000303|PubMed:11340299, ECO:0000303|Ref.15}, Ig delta chain C region, Ig delta chain C region NIG-65, Ig delta chain C region WAH, IGHD {ECO:0000303|PubMed:11340299, ECO:0000303|Ref.15}

Dilution
IHC-P~~Ready-to-use

Storage
Maintain refrigerated at 2-8°C

Precautions	**IgD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.**

IgD - Protein Information

Name IGHD {ECO:0000303|PubMed:11340299, ECO:0000303|Ref.15}

Function	**Constant region of immunoglobulin heavy chains. Immunoglobulins, also known as antibodies, are membrane-bound or secreted glycoproteins produced by B lymphocytes. In the recognition phase of humoral immunity, the membrane-bound immunoglobulins serve as receptors which, upon binding of a specific antigen, trigger the clonal expansion and differentiation of B lymphocytes into immunoglobulins-secreting plasma cells. Secreted immunoglobulins mediate the effector phase of humoral immunity, which**

Cellular Location	**results in the elimination of bound antigens (PubMed:22158414, PubMed:20176268). The antigen binding site is formed by the variable domain of one heavy chain, together with that of its associated light chain. Thus, each immunoglobulin has two antigen binding sites with remarkable affinity for a particular antigen. The variable domains are assembled by a process called V-(D)-J rearrangement and can then be subjected to somatic hypermutations which, after exposure to antigen and selection, allow affinity maturation for a particular antigen (PubMed:17576170, PubMed:20176268). 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 (PubMed:8774350, PubMed:10702483, PubMed:11282392). Isoform 1: Secreted**

IgD - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IgD - Images

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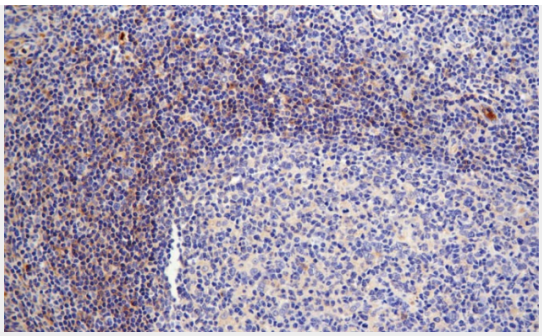
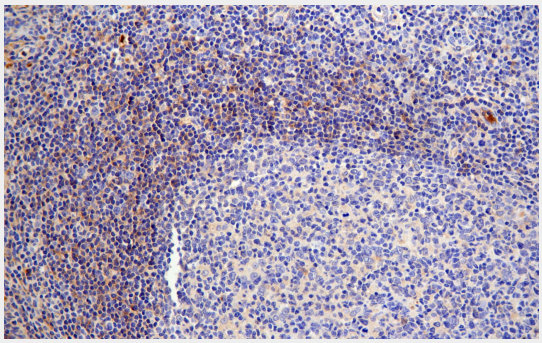


Tonsil



Immunohistochemical analysis of paraffin-embedded human tonsil tissue using AD80324 performed on the Abcarta® FAIP-30 Fully automated IHC platform.Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(Ready-to-use) for 15 min at room temperature. AmpSeeTM Detection Systems（Abcepta:AR005） was used as the secondary antibody.