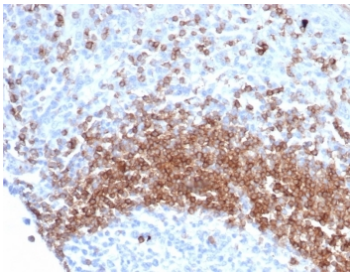
Recombinant IgD Antibody Rabbit Monoclonal IGHD/6818R / Immunoglobulin D Antibody [clone IGHD/6818R] (V4323)

Catalog No.	Formulation	Size
V4323-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4323-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4323SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

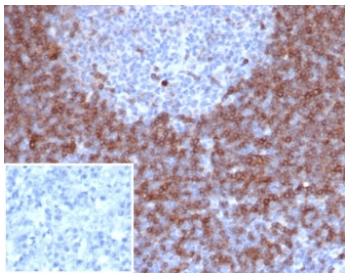
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	IGHD/6818R
Purity	Protein A/G affinity
UniProt	P01880
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This recombinant IgD antibody is available for research use only.



Recombinant IgD Antibody Rabbit Monoclonal IGHD/6818R immunohistochemistry analysis of human tonsil tissue. Formalin-fixed paraffin-embedded human tonsil tissue stained with Recombinant IgD Antibody Rabbit Monoclonal IGHD/6818R shows HRP-DAB brown chromogenic staining in B lymphocytes within lymphoid follicles. Positive cells are concentrated in mantle zone regions surrounding germinal centers and display membranous and cytoplasmic staining consistent with Immunoglobulin D expression in mature naive B lymphocytes. The inset shows the negative control in which PBS was used in place of the primary antibody, demonstrating absence of specific staining. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes followed by cooling prior to antibody incubation.



Recombinant IgD Antibody Rabbit Monoclonal IGHD/6818R immunohistochemistry analysis of human lymph node tissue. Formalin-fixed paraffin-embedded human lymph node tissue stained with Recombinant IgD Antibody Rabbit Monoclonal IGHD/6818R shows HRP-DAB brown chromogenic staining in B lymphocytes within lymphoid follicles. Positive cells are predominantly localized to mantle zone regions surrounding germinal centers and display membranous and cytoplasmic staining consistent with Immunoglobulin D expression in mature naive B lymphocytes. The inset shows the negative control in which PBS was used in place of the primary antibody, demonstrating absence of specific staining. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes followed by cooling prior to antibody incubation.

Description

Immunoglobulin D (IgD) is an antibody isotype primarily expressed on the surface of mature naive B lymphocytes and functions as part of the B cell receptor complex responsible for antigen recognition and immune activation. IgD is encoded by the IGHD gene and forms a membrane-bound immunoglobulin together with light chains on B cells. Recombinant IgD Antibody Rabbit Monoclonal IGHD/6818R recognizes Immunoglobulin D and enables detection of IgD-expressing B lymphocytes in studies examining lymphoid tissue organization and adaptive immune responses.

IgD belongs to the immunoglobulin superfamily and consists of two delta heavy chains paired with two immunoglobulin light chains, forming a monomeric antibody molecule typical of most immunoglobulins. On mature B lymphocytes, membrane-bound IgD is commonly co-expressed with surface IgM and contributes to antigen receptor signaling. Engagement of the IgD-containing B cell receptor complex activates intracellular signaling pathways that regulate B cell activation, survival, and differentiation within the adaptive immune system.

In normal human tissues, IgD expression is most prominent in B lymphocytes located in secondary lymphoid organs such as tonsil, lymph node, and spleen. Within lymphoid follicles, IgD-positive B cells are typically enriched in mantle zone regions surrounding germinal centers, reflecting the presence of mature naive B cells prior to class-switch recombination. This distribution pattern makes IgD immunostaining useful for identifying B cell subsets and evaluating follicular architecture in lymphoid tissues.

Detection of IgD expression can also contribute to research examining lymphoid malignancies and immune-related diseases. Immunoglobulin markers including IgD are used to study B cell lineage, differentiation status, and tumor-associated immune cell populations in hematologic and immunologic investigations.

A recombinant rabbit monoclonal IgD antibody such as clone IGHD/6818R provides a sensitive reagent for detecting IgD in research applications involving lymphoid tissues and B cell biology. Staining patterns typically reveal membranous and cytoplasmic localization in B lymphocytes consistent with IgD distribution as a component of the B cell receptor complex.

For detection of total human IgD, see our Recombinant Human IgD Antibody RM123 page.

Application Notes

Optimal dilution of the Recombinant IgD Antibody Rabbit Monoclonal IGHD/6818R should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-200) from the human protein was used as the immunogen for the recombinant IgD antibody IGHD/6818R.

Storage

Aliquot the recombinant IgD antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Immunoglobulin D antibody, IgD antibody, IGHD antibody, IgD heavy chain antibody

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