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Human Lambda Light Chain Mouse mAb

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Catalog # AP94801

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P0CG04
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	11348
Physical State	Liquid
Immunogen	Purified native protein
Isotype	IgG1
Buffer	0.01M PBS (pH7.4).
SUBCELLULAR LOCATION	Cytoplasmic
SIMILARITY	Contains 1 Ig-like (immunoglobulin-like) domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	All five immunoglobulin classes share the same basic four polypeptide chain structure of two heavy-chains and two light chains. There are five heavy chain types, and two light-chain types (Kappa and Lambda) both having a molecular weight of 22.5kDa. Any heavy-chain type can associate with either light-chain type, but on any immunoglobulin molecule both light-chains are of the same type. Kappa and Lambda consist of a variable region and a constant region and can easily be differentiated by the antigenic properties of the constant region.

Additional Information

Other Names	Immunoglobulin lambda constant 1 {ECO:0000303|PubMed:11872955, ECO:0000303|Ref.6}, Ig lambda chain C region MGC, Ig lambda-1 chain C region, IGLC1 {ECO:0000303|PubMed:11872955, ECO:0000303|Ref.6}
Dilution	IHC-P=1:200-1000,WB=1:500-2000,IHC-F=1:200-1000,IF=1:200-1000
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.

Protein Information

Name	IGLC1 {ECO:0000303|PubMed:11872955, ECO:0000303|Ref.6}
Function	Constant region of immunoglobulin light 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 results in the elimination of bound antigens (PubMed:20176268, PubMed:22158414). 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).

Cellular Location Secreted. Cell membrane

Background

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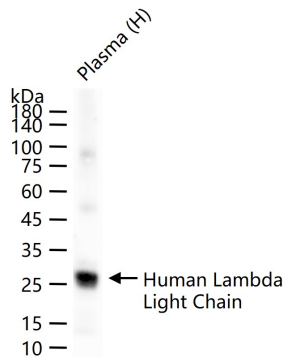
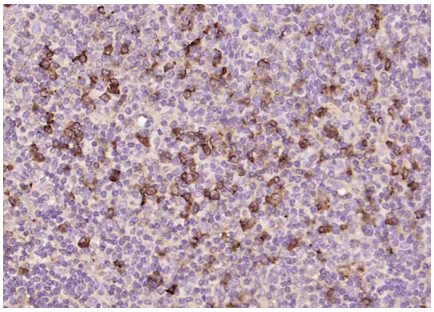
Images



25 ug total protein per lane of various lysates (see on figure) probed with Human Lambda Light Chain monoclonal antibody, unconjugated (AP94801) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded (human tonsil); Antigen retrieval by boiling in E sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (Human Lambda chain) Monoclonal Antibody, Unconjugated (AP94801) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructionsand DAB staining.