

Anti-Human CD298 Antibody, Clone LNH-94, APC

Antibodies

Mouse monoclonal IgG1 antibody
against human CD298, APC-conjugated

Catalog #60159AZ

100 Tests



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Product Description

The LNH-94 antibody reacts with human CD298, the $\beta 3$ subunit of the Na⁺/K⁺ ATPase. The Na⁺/K⁺ ATPase is a 42 kDa type II transmembrane protein composed of four catalytic α subunits and three smaller glycosylated non-catalytic β subunits. The Na⁺/K⁺ ATPase is important for establishing electrochemical gradients and maintaining normal resting membrane potential by coupling ATP hydrolysis to the active transport of Na⁺ and K⁺. The β subunits have been reported to act as chaperones that stabilize the α subunits and occlude K⁺. CD298 has been used to identify metastatic human cancer cells in mouse xenograft models and has been reported to modulate aspects of immunity, including HIV production, and T cell and B cell activation. CD298 is found on leukocytes, platelets, and most other tissue types.

Target Antigen Name:	CD298
Alternative Names:	ATP1B3, Na ⁺ /K ⁺ ATPase beta3
Gene ID:	483
Species Reactivity:	Human
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	LNH-94
Isotype:	IgG1, kappa
Immunogen:	Not available
Conjugate:	APC

Applications

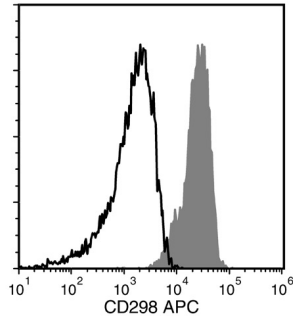
Verified:	FC
Reported:	FC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA
Purification:	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com .
Directions for Use:	For flow cytometry the suggested use of this antibody is 5 μ L per 1 x 10 ⁶ cells in 100 μ L volume. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs; gated on lymphocytes) labeled with Anti-Human CD298 Antibody, Clone LNH-94, APC (filled histogram), or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, APC (Catalog # 60070AZ; solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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2. Lawson DA et al. (2015) Single-cell analysis reveals a stem-cell program in human metastatic breast cancer cells. *Nature* 526(7571): 131–5.
3. Chiampanichayakul S et al. (2002) Engagement of Na,K-ATPase beta3 subunit by a specific mAb suppresses T and B lymphocyte activation. *Int Immunol* 14(12): 1407–14.
4. Malik N et al. (1996) Identification of the Mammalian Na,K-ATPase beta 3 subunit. *J Biol Chem* 271(37): 22754–8.
5. Skou JC. (1957) The influence of some cations on an adenosine triphosphatase from peripheral nerves. *Biochim Biophys Acta* 23(2): 394–401.

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