

PE anti-human HVCN1 Antibody

Catalog# / Size	377109 / 25 tests 377110 / 100 tests
Clone	W23068A
Regulatory Status	RUO
Other Names	Hydrogen voltage gated channel 1, HV1, VSOP, voltage sensor domain-only protein
Isotype	Rat IgG2a, κ
Description	Hydrogen voltage-gated channel 1 (HVCN1) is a voltage gated, proton-selective channel expressed in immune cells, spermatozoa, and upper respiratory tract epithelial cells. HVCN1 mediates proton conductance to prevent membrane depolarization and cytoplasmic acidification. In phagocytes, it is required for the oxidative burst that underlies microbial killing, and in B cells, it facilitates antibody production. HVCN1 can also regulate functions in other cells including spermatozoa.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Recombinant human HVCN1
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool).
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)

Antigen Details

Structure	Transmembrane protein with four helix transmembrane domain and a coiled coil c-terminal cytoplasmic domain
Distribution	Immune cells (B-cells, Neutrophils, Monocytes), spermatozoa, upper respiratory epithelium
Function	Proton transporter
Molecular Family	Ion Channels

Antigen References

1. Zhu X, *et al.* 2013. *BMC Immunol.* 14:24.
2. Hondares E, *et al.* 2014. *Proc. Natl. Acad. Sci.* 111:50.
3. Okochi Y, *et al.* 2021. *Int. J. Mol. Sci.* 22:2620.
4. Wang Y, *et al.* 2011. *Biochem. Biophys. Res. Commun.* 2: 412.
5. Cherny VV, *et al.* 2015. *J. Gen. Physiol.* 5: 146.
6. De Coursey TE. 2015. *Biochemistry.* 54: 21.

Gene ID

[84329](#)

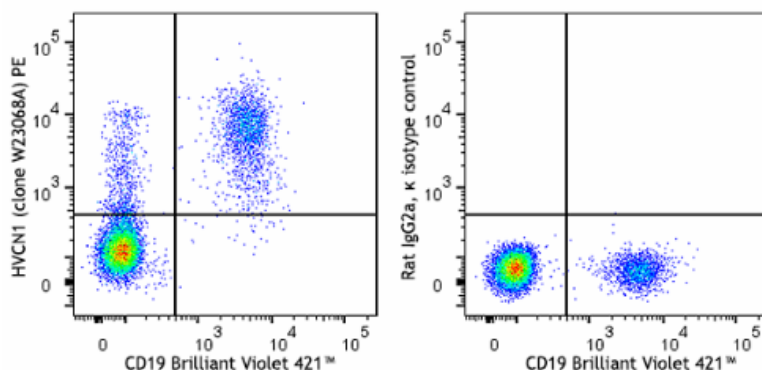
Related Protocols

- [Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human HVCN1, PE anti-human HVCN1 Antibody

Product Data



Human peripheral blood mononuclear cells were fixed, permeabilized and intracellularly stained with anti-human CD19 (clone HIB19) Brilliant Violet 421™ and anti-human HVCN1 (clone W23068A) PE (left) or rat IgG2a, κ PE isotype control (right). Data shown is gated on the lymphocyte population.

For Research Use Only. Not for diagnostic or therapeutic use.

This product is supplied subject to the terms and conditions, including the limited license, located at www.biolegend.com/terms ("Terms") and may be used only as provided in the Terms. Without limiting the foregoing, BioLegend products may not be used for any Commercial Purpose as defined in the Terms, resold in any form, used in manufacturing, or reverse engineered, sequenced, or otherwise studied or used to learn its design or composition without express written approval of BioLegend. Regardless of the information given in this document, user is solely responsible for determining any license requirements necessary for user's intended use and assumes all risk and liability arising from use of the product. BioLegend is not responsible for patent infringement or any other risks or liabilities whatsoever resulting from the use of its products.

BioLegend, the BioLegend logo, and all other trademarks are property of BioLegend, Inc. or their respective owners, and all rights are reserved.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587