

# HVCN1 Monoclonal antibody

Catalog Number: 66449-1-Ig

## Basic Information

<b>Catalog Number:</b> 66449-1-Ig	<b>GenBank Accession Number:</b> BC032672	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 1800 µg/ml	<b>GeneID (NCBI):</b> 84329	<b>CloneNo.:</b> 1E4C4
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q96D96	<b>Recommended Dilutions:</b> WB 1:2000-1:16000 IHC 1:50-1:500 IF-P 1:200-1:800
<b>Isotype:</b> IgG1	<b>Full Name:</b> hydrogen voltage-gated channel 1	
<b>Immunogen Catalog Number:</b> AG5350	<b>Calculated MW:</b> 273 aa, 32 kDa <b>Observed MW:</b> 28-35 kDa, 40 kDa, 60 kDa	

## Applications

<b>Tested Applications:</b> IF-P, IHC, WB, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human	<b>WB :</b> Raji cells, HeLa cells
<b>Note-IHC:</b> suggested antigen retrieval with <b>TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IHC :</b> human tonsillitis tissue, <b>IF-P :</b> human tonsillitis tissue,

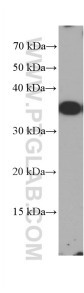
## Background Information

HVCN1, also named as VSOP and HV1, Belongs to the hydrogen channel family. HVCN1 mediates the voltage-dependent proton permeability of excitable membranes. It forms a proton-selective channel through which protons may pass in accordance with their electrochemical gradient. Proton efflux, HVCN1 is accompanied by membrane depolarization, facilitates acute production of reactive oxygen species in phagocytosis. HVCN1, the voltage-sensitive proton channel, is present in human sperm and is an important regulator of the functional maturation of sperm. HVCN1 has four isoforms with MW 28-32 kDa or 40 kDa (modification). It has a dimer form with MW 60 kDa.

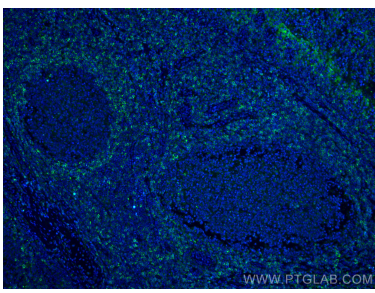
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

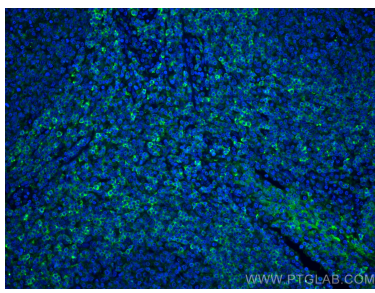
Selected Validation Data



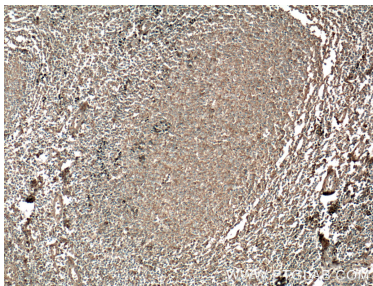
Raji cells were subjected to SDS PAGE followed by western blot with 66449-1-Ig (HVCN1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



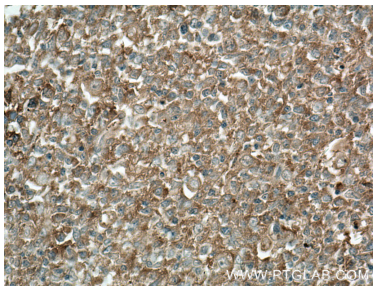
Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using HVCN1 antibody (66449-1-Ig, Clone: 1E4C4 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



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Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66449-1-Ig (HVCN1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66449-1-Ig (HVCN1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).