

## ORAI3 Monoclonal Antibody

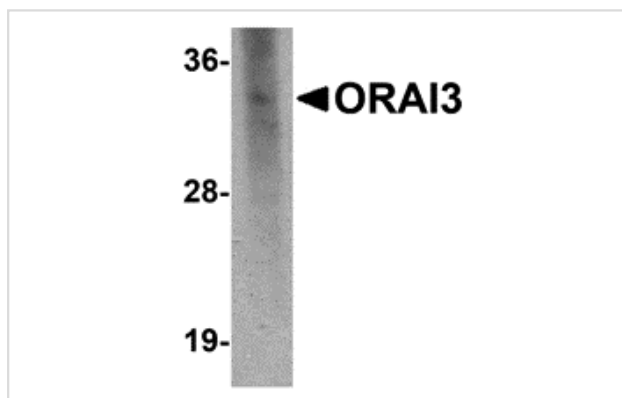
Catalog No: #26028

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

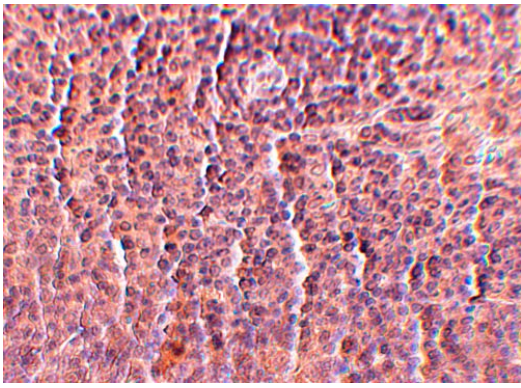
## Description

Product Name	ORAI3 Monoclonal Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	mAb (Clone 2H2G9)
Purification	Immunoaffinity chromatography purified IgG
Applications	ELISA WB IHC
Species Reactivity	Hu Rt
Immunogen Type	Peptide
Immunogen Description	A 19 amino acid peptide from near the carboxy terminus of human ORAI3.
Target Name	ORAI3
Other Names	ORAI3 (2H2G9), Transmembrane protein 142C, TMEM142C, Calcium release-activated calcium channel protein 3
Accession No.	Swiss-Prot:Q9BRQ5Gene ID:93129
Uniprot	Q9BRQ5
GeneID	93129;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year.

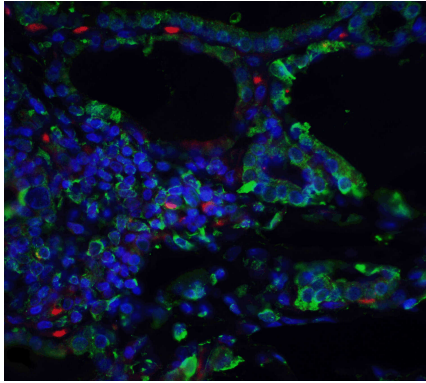
## Images



Western blot analysis of ORAI3 in rat spleen lysate with ORAI3 antibody at 2 ug/mL.



Immunohistochemistry of ORAI3 in rat spleen tissue with ORAI3 antibody at 2.5 ug/mL.



Immunofluorescence of ORAI3 in human spleen tissue with ORAI3 antibody at 5 µg/ml.

## Background

Antigen stimulation of immune cells triggers  $Ca^{++}$  entry through  $Ca^{++}$  release-activated  $Ca^{++}$  (CRAC) channels. ORAI3 is one of two mammalian homologs to ORAI1, a recently identified four-transmembrane spanning protein that is an essential component of CRAC. All three homologs have been shown to function as  $Ca^{++}$  plasma membrane channels gated through interactions with STIM1, the store-activated endoplasmic reticulum  $Ca^{++}$  sensor. However, ORAI3 channels failed to produce detectable  $Ca^{++}$  selective currents in cells co-transfected with ORAI3 and STIM1, indicating that ORAI3 channels undergo a lesser degree of depotentiation than ORAI1 or ORAI2.  $Na^{+}$  currents through ORAI1, 2 and 3 channels were equally inhibited by extracellular  $Ca^{++}$ , indicating that each have similar affinities for  $Ca^{++}$  within the selectivity filter. This antibody is predicted to have no cross-reactivity to ORAI1 or ORAI2. Larger molecular weight bands are sometimes seen in SDS-PAGE; these may represent post-translationally modified ORAI 3.

Note: This product is for in vitro research use only