10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-ZNRF2 Antibody

Rabbit Polyclonal antibody
Catalog # ABV11873

Product Information

Application	WB, IHC, IF
Primary Accession	Q8NHG8
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	24115

Additional Information

Gene ID	223082
Positive Control	WB: HEK293T, A549, RAW264.7, H9C2 cel lysate; IHC: human brain tissue; IFC: A549 cells
Application & Usage	WB; 1:500 – 1:2000, IHC; 1:50 – 1:200, IF/IC; 1:50 – 1:100
Alias Symbol	ZNRF2
Other Names	RNF202, E3 ubiquitin-protein ligase ZNRF2, Protein Ells2, RING finger protein 202, Zinc/RING finger protein 2
Formulation	In 0.42% Potassium phosphate; 0.87% Sodium chloride; pH 7.3; 30% glycerol and 0.01% sodium azide
Reconstitution & Storage	12 months under -20°C
Background Descriptions	
Precautions	Anti-ZNRF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

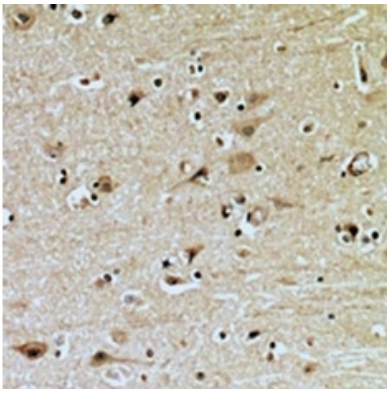
Name	ZNRF2
Synonyms	RNF202
Function	E3 ubiquitin-protein ligase that plays a role in the establishment and maintenance of neuronal transmission and plasticity. Ubiquitinates the Na(+)/K(+) ATPase alpha-1 subunit/ATP1A1 and thereby influences its endocytosis and/or degradation (PubMed:22797923). Acts also as a positive regulator of mTORC1 activation by amino acids, which functions upstream of the V-ATPase and of Rag-GTPases (PubMed:27244671). In turn, phosphorylation by mTOR leads to its inhibition via targeting to the cytosol

	allowing a self-regulating feedback mechanism (PubMed:27244671).
Cellular Location	Endosome membrane; Peripheral membrane protein. Lysosome membrane; Peripheral membrane protein. Presynaptic cell membrane; Peripheral membrane protein. Cytoplasm
Tissue Location	Highly expressed in the brain, with higher expression during development than in adult. Expressed also in mammary glands, testis, colon and kidney.

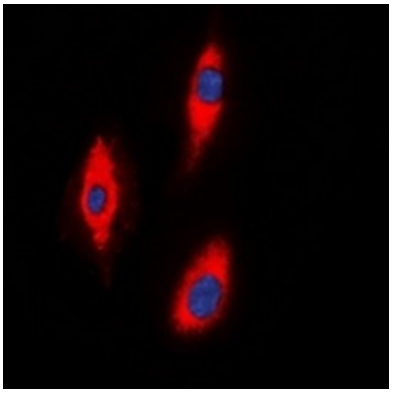
Background

E3 ubiquitin-protein ligase ZNRF2 protein plays a role in the establishment and maintenance of neuronal transmission and plasticity via its ubiquitin ligase activity. E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfer the ubiquitin to targeted substrates.

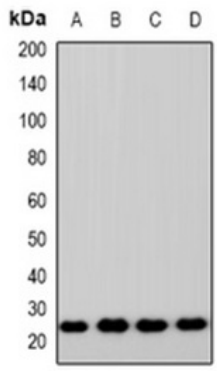
Images



Immunohistochemical analysis of ZNRF2 staining in human brain formalin fixed paraffin embedded tissue section.



Immunofluorescent analysis of ZNRF2 staining in A549 cells.



Western blot analysis of ZNRF2 expression in HEK293T(A), A549(B), RAW264.7(C), H9C2(D) whole cell lysates.