

Rabbit Calretinin Polyclonal Antibody | anti-CALB2 antibody

Calretinin

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA76734	Rabbit	Human, Mouse, Rat	Immunofluorescence, Immunohistochemistry, Western Blot, Immunocytochemistry

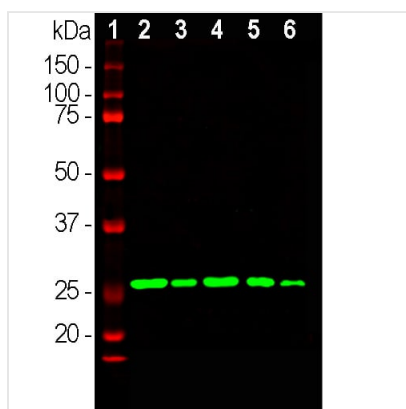
PRODUCT SYNONYMS

Calretinin; Polyclonal Antibody; anti-CALB2 antibody

PRODUCT SPECIFICATIONS

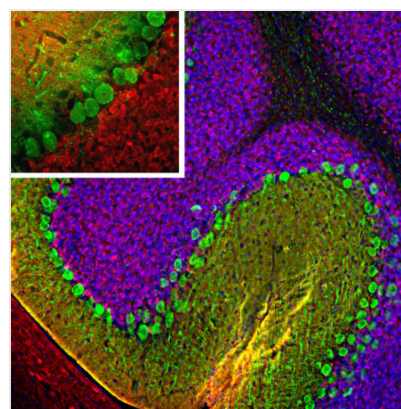
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Form/Format	Liquid. Supplied as an aliquot of serum plus 5mM NaN3
Applicable Applications for anti-CALB2 antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot), ICC (Immunocytochemistry)
Immunogen	Full-length recombinant human calretinin protein expressed in and purified from E coli.
Preparation and Storage	Antibody can also be aliquotted and stored frozen at -20 degree C in a manual defrost freezer for sixmonths without detectable loss of activity. The antibody can be stored at 2 degree - 8 degree C for 1 month without detectable loss of activity. Avoid repeated freeze-thaw cycles.

IMAGES



WB (Western Blot)

Western blot analysis of different tissue lysates probed with rabbit pAb to calretinin, AAA76734, dilution 1:10,000 in green: [1] protein standard (red), [2] rat brain, [3] rat spinal cord, [4] mouse brain, [5] mouse spinal cord, and [6] cow spinal cord. A band at 29kDa corresponds to the calretinin protein.



IF (Immunofluorescence)

Immunofluorescent analysis of rat cerebellum section stained with rabbit pAb to calretinin, AAA76734, dilution 1:5,000 in red, and costained with mouse mAb to calbindin in green. The calretinin antibody stains interneurons predominantly in the molecular layer, while the calbindin antibody strongly labels the dendrites and perikarya of Purkinje cells in the molecular layer of the cerebellum.

ADDITIONAL INFORMATION

Related Product Information for anti-CALB2 antibody	Calretinin is a member of the large superfamily of cytoplasmic Calcium binding proteins and is expressed in mammalian central nerve system, testis, fallopian tube and pancreas. It contains "EF hand" type Calcium binding motifs and in the brain is localized in certain classes of neurons, the prototype for which is parvalbumin. Calretinin is particularly concentrated in some cerebellar granular cells and their parallel fibers, but is also found in many GABAergic interneurons in the cortex. These GABAergic interneurons in most cases express only one of three related Calcium binding proteins, namely calretinin, calbindin or parvalbumin. As a result these important inhibitory interneurons can be identified and classified based on their content of these three proteins. Each type of neuron as defined in this fashion has distinct electrophysiological and functional properties. The function of calretinin appears to be primarily buffering the Calcium level in cells and affect intracellular Calcium signals. Calretinin deficiency in mice in the mossy cells of the dentate gyrus and granule cells results in abnormal excitability in the cerebellar neuronal network and impairment of long-term potentiation and motor coordination. The rabbit polyclonal antibody to Calretinin, RA22144, was made against full length recombinant human calretinin expressed in and purified from E coli. The calretinin protein is related in amino acid sequence to calbindin and to a lesser extent parvalbumin, so, for studies of GABAergic interneurons, it is important to verify that antibodies developed against one protein do not cross react with either of the others, which has been done with this antibody.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	825634
UniProt Accession #	P22676; Q53HD2; Q96BK4; A8K4Y1
Molecular Weight	31,540 Da
NCBI Official Full Name	calretinin
UniProt Protein Name	Calretinin
UniProt Gene Name	CALB2
UniProt Synonym Gene Names	CAB29; CR
UniProt Entry Name	CALB2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.