

ICA1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP54464

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q05084
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54645
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ICA1
Epitope Specificity	1-100/483
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm > cytosol. Golgi apparatus membrane. Cytoplasmic vesicle > secretory vesicle membrane. Cytoplasmic vesicle > secretory vesicle > synaptic vesicle membrane. Predominantly cytosolic. Also exists as a membrane-bound form which has been found associated with synaptic vesicles and also with the Golgi complex and immature secretory granules.
SIMILARITY	Contains 1 AH domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Carbonic anhydrases (CAs), also designated carbonate dehydratases or carbonate hydrolyases, form a large family of genes that encode zinc metalloenzymes of great physiologic importance. As catalysts of the reversible hydration of carbon dioxide, these enzymes participate in a variety of biologic processes, including respiration, acid-base balance, bone resorption and calcification as well as the formation of aqueous humor, cerebrospinal fluid, saliva and gastric acid. Genes in the ?carbonic anhydrase family encode either active carbonic anhydrase isozymes or 撰catalytic?(devoid of CO2 hydration activity) carbonic anhydrase-related proteins. Human CA I (CA1) is encoded by the CA1 gene, which maps to a region on chromosome 8 that harbors a cluster of CA genes. CA I localizes to the cytoplasm and research indicates that a severe deficiency of CA I does not result in any obvious hematological or renal consequences.

Additional Information

Gene ID	3382
Other Names	Islet cell autoantigen 1, 69 kDa islet cell autoantigen, ICA69, Islet cell autoantigen p69, ICAp69, p69, ICA1

Target/Specificity	Expressed abundantly in pancreas, heart and brain with low levels of expression in lung, kidney, liver and thyroid.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ICA1
Function	May play a role in neurotransmitter secretion.
Cellular Location	Cytoplasm, cytosol. Golgi apparatus membrane; Peripheral membrane protein. Cytoplasmic vesicle, secretory vesicle membrane; Peripheral membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Peripheral membrane protein. Note=Predominantly cytosolic. Also exists as a membrane-bound form which has been found associated with synaptic vesicles and also with the Golgi complex and immature secretory granules
Tissue Location	Expressed abundantly in pancreas, heart and brain with low levels of expression in lung, kidney, liver and thyroid

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.