Datasheet for ABIN968008

anti-alpha Adaptin antibody (AA 38-215)

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Overview

Quantity:	50 µg
Target:	alpha Adaptin (AP2A1)
Binding Specificity:	AA 38-215
Reactivity:	Human, Mouse, Rat, Dog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This alpha Adaptin antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunofluorescence (IF), BioImaging (BI), Immunohistochemistry (Formalin-fixed Sections) (IHC (f))

Product Details

Immunogen:	Mouse Adaptin alpha [A] aa. 38-215
Clone:	8-Adaptin alpha
Isotype:	IgG1
Cross-Reactivity:	Rat (Rattus), Human, Dog (Canine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

Product Details

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	alpha Adaptin (AP2A1)
Alternative Name:	Adaptin alpha (AP2A1 Products)
Background:	Sorting of integral membrane proteins at various stages of the endocytic and secretory pathways is mediated by vesicular trafficking between a variety of organelles. Two sorting signals are tyrosine-based and dileucine-based signals that interact with heterotetrameric adaptor protein complexes (AP-1, AP-2, AP-3, and AP-4), which are associated with the vesicle coats. These coatomers contain two large Adaptin proteins (alpha, gamma, delta, or epsilon and beta1, beta2, beta3, or beta4, respectively) that are noncovalently linked to one medium chain (μ1, μ2, μ3, or μ4) and one small chain (sigma1, sigma2, sigma3, or sigma4). The AP-1 and AP-3 complexes are involved in protein sorting from the TGN and endosomes, while AP-2 adaptor complexes are involved in clathrin-mediated endocytosis. In the AP-2 complex, Adaptin alpha is expressed in two very similar isoforms from two different genes. Adaptin alpha [A] (112kDa) is expressed primarily in brain, while Adaptin alpha [C] (105kDa) is expressed in brain, liver and other tissues. This antibody is routinely tested by western blot analysis.
Molecular Weight:	112 kDa
Pathways:	Notch Signaling, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, EGFR Downregulation

Application Details

Comment:	Related Products: ABIN968545, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 μg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide

Handling

Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20°C.

Publications

Product cited in:

Jarousse, Wilson, Arac, Rizo, Kelly: "Endocytosis of synaptotagmin 1 is mediated by a novel, tryptophan-containing motif." in: **Traffic (Copenhagen, Denmark)**, Vol. 4, Issue 7, pp. 468-78, (2003) (PubMed).

Wasiak, Legendre-Guillemin, Puertollano, Blondeau, Girard, de Heuvel, Boismenu, Bell, Bonifacino, McPherson: "Enthoprotin: a novel clathrin-associated protein identified through subcellular proteomics." in: **The Journal of cell biology**, Vol. 158, Issue 5, pp. 855-62, (2002) (PubMed).

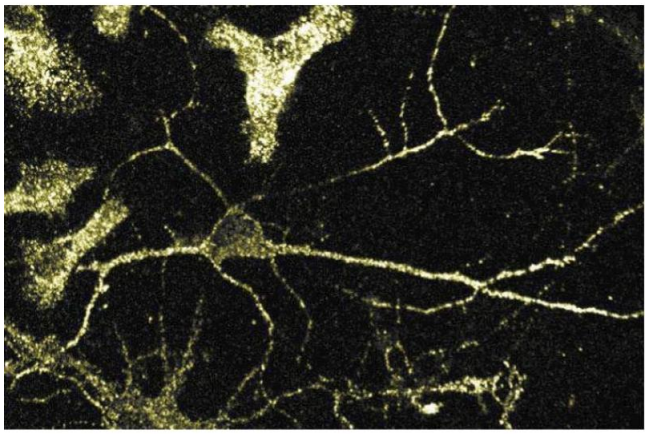
Santolini, Puri, Salcini, Gagliani, Pelicci, Tacchetti, Di Fiore: "Numb is an endocytic protein." in: **The Journal of cell biology**, Vol. 151, Issue 6, pp. 1345-52, (2001) (PubMed).

Teo, Tan, Lim, Manser: "The tyrosine kinase ACK1 associates with clathrin-coated vesicles through a binding motif shared by arrestin and other adaptors." in: **The Journal of biological chemistry**, Vol. 276, Issue 21, pp. 18392-8, (2001) (PubMed).

Robinson: "Cloning of cDNAs encoding two related 100-kD coated vesicle proteins (alpha-adaptins)." in: **The Journal of cell biology**, Vol. 108, Issue 3, pp. 833-42, (1989) (PubMed).

Western Blotting

Image 1. Western blot analysis of Adaptin alpha on a rat cerebrum lysate. Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the anti-Adaptin alpha antibody.



Immunofluorescence

Image 2. Immunofluorescence staining of rat neurons.