Datasheet for ABIN968175

anti-ARF3 antibody (AA 1-181)

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Overview

Quantity:	50 µg
Target:	ARF3
Binding Specificity:	AA 1-181
Reactivity:	Human, Rat, Mouse, Chicken, Dog, Frog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ARF3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

Product Details

Immunogen:	Human ARF3 aa. 1-181
Clone:	41-ARF3
Isotype:	IgG1
Cross-Reactivity:	Rat (Rattus), Mouse (Murine), Chicken, Dog (Canine), Frog
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:	ARF3
Alternative Name:	ARF3 (ARF3 Products)
Background:	The ADP-ribosylation factors (ARFs) belong to the multigene family of small GTPases capable of activating cholera toxin. ARFs fall into three different classes: Class I is composed of ARF-1, ARF-2, and ARF-3, Class II consists of ARF-4 and ARF-5, and Class III includes ARF6. Unique to ARFs is their lack of intrinsic GTP hydrolysis activity, a high affinity for GDP in a Mg2+-dependent manner, and phospholipid requirement for nucleotide exchange. ARFs are involved in intravesicular acidification of microsomal vesicles, endosome fusion, nuclear membrane assembly, and formation of clathrin-coated vesicles. In addition, GTP and ARF-3 are required for the activation of phospholipase D (PLD), an early cellular response triggered by the binding of receptors on the cell surface in response to numerous extracellular signals. Although predominantly cytosolic, ARF-3 can be translocated to cellular membranes upon cellular stimulation. The transition between the GDP-bound ARF-3 to the GTP-ARF-3 is facilitated by a high molecular weight guanine nucleotide-exchange factor sensitive to brefeldin. ARF-3 has been reported to be the most abundant in brain, kidney, and liver. Synonyms: ADP Ribosylation Factor-3
Molecular Weight:	20 kDa
Pathways:	Inositol Metabolic Process, Cellular Glucan Metabolic Process

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:

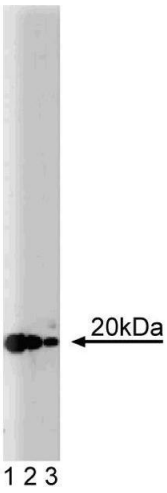
Lee, Stevens, Hsu, Tsai, Lee, Moss, Vaughan: "Expression in human endothelial cells of ADP-ribosylation factors, 20-kDa guanine nucleotide-binding proteins involved in the initiation of vesicular transport." in: **Journal of molecular and cellular cardiology**, Vol. 28, Issue 9, pp. 1911-20, (1997) (PubMed).

Morinaga, Tsai, Moss, Vaughan: "Isolation of a brefeldin A-inhibited guanine nucleotide-exchange protein for ADP ribosylation factor (ARF) 1 and ARF3 that contains a Sec7-like domain." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 93, Issue 23, pp. 12856-60, (1996) (PubMed).

Cockcroft, Thomas, Fensome, Geny, Cunningham, Gout, Hiles, Totty, Truong, Hsuan: " Phospholipase D: a downstream effector of ARF in granulocytes." in: **Science (New York, N.Y.)**, Vol. 263, Issue 5146, pp. 523-6, (1994) (PubMed).

Moss, Vaughan: "ADP-ribosylation factors, 20,000 M(r) guanine nucleotide-binding protein activators of cholera toxin and components of intracellular vesicular transport systems." in: **Cellular signalling**, Vol. 5, Issue 4, pp. 367-79, (1993) (PubMed).

Kahn, Radding: "Separation of the presynaptic and synaptic phases of homologous pairing promoted by recA protein." in: **The Journal of biological chemistry**, Vol. 259, Issue 12, pp. 7495-503, (1984) (PubMed).



Western Blotting

Image 1. Western blot analysis of ARF-3 on a rat cerebrum lysate. Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of the mouse anti- ARF-3 antibody.

Image 2.