Datasheet for ABIN968224

anti-DLG1 antibody (AA 5-213)

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Overview

Quantity:	50 µg
Target:	DLG1
Binding Specificity:	AA 5-213
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This DLG1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunofluorescence (IF)

Product Details

Immunogen:	Human Dlg aa. 5-213
Clone:	12-Dlg
Isotype:	IgG1
Cross-Reactivity:	Mouse (Murine), Rat (Rattus)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Source of all serum proteins is from USDA inspected abattoirs located in the United States. 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. Please refer to us for technical protocols.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

	chromatography.

Target Details

Target:	DLG1
Alternative Name:	Dlg (DLG1 Products)
Background:	The human homologue of the Drosophila discs large tumor suppressor protein (hDlg) is a member of the MAGUKs (membrane associated guanylate kinases) protein family. Members of this family (PSD-95, ZO-1, ZO-2, and human erythroid p55) are involved in cell structure and signaling events. The hDlg protein consists of several domains: three PDZ (PSD-95/Discs large/ZO-1) domains, an SH3 domain, and a guanylate kinase-like domain. However, hDlg contains a proline rich N-terminus region consisting of two SH3 domain binding sites that are not normally found in the MAGUKs family. The PDZ domains mediate the interaction of several proteins, such as Shaker-type K+ channel proteins and the APC tumor suppressor protein. Dlg is a peripheral membrane that associates with the cytoskeleton. The cellular location and binding sites of Dlg suggest a role in structure, signal transduction, and growth regulation. Supporting these probable Dlg functions are reports demonstrating that recessive mutations in Drosophila dlg lead to imaginal disc neoplasia and death. Also, Dlg has been reported to bind p56 [lck] tyrosine kinase and the Kv1.3 channel in human T lymphocytes. This antibody clone to Dlg has been reported to immunoprecipitate and weakly recognize PSD-95 on rat cerebrum lysates, presumably due to crossreactivity between homologous regions of the two proteins (i.e amino acid regions 104-119 and 193-198).
Molecular Weight:	140 kDa
Pathways:	Regulation of Actin Filament Polymerization, Cell-Cell Junction Organization, Production of Molecular Mediator of Immune Response

Application Details

Comment:	Related Products: ABIN968533, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL

Handling

Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
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:

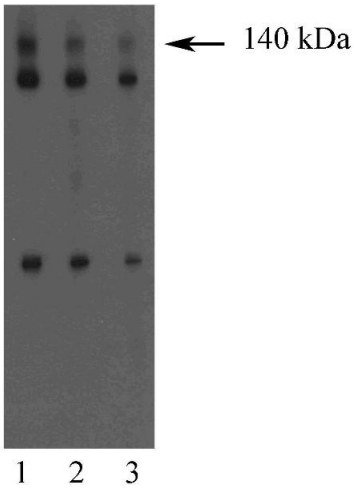
Caruana, Bernstein: "Craniofacial dysmorphogenesis including cleft palate in mice with an insertional mutation in the discs large gene." in: **Molecular and cellular biology**, Vol. 21, Issue 5, pp. 1475-83, (2001) (PubMed).

Vazquez, Grossman, Takahashi, Rokas, Nakamura, Sellers: "Phosphorylation of the PTEN tail acts as an inhibitory switch by preventing its recruitment into a protein complex." in: **The Journal of biological chemistry**, Vol. 276, Issue 52, pp. 48627-30, (2001) (PubMed).

Adey, Huang, Ormonde, Baumgard, Pero, Byreddy, Tavtigian, Bartel: "Threonine phosphorylation of the MMAC1/PTEN PDZ binding domain both inhibits and stimulates PDZ binding." in: **Cancer research**, Vol. 60, Issue 1, pp. 35-7, (2000) (PubMed).

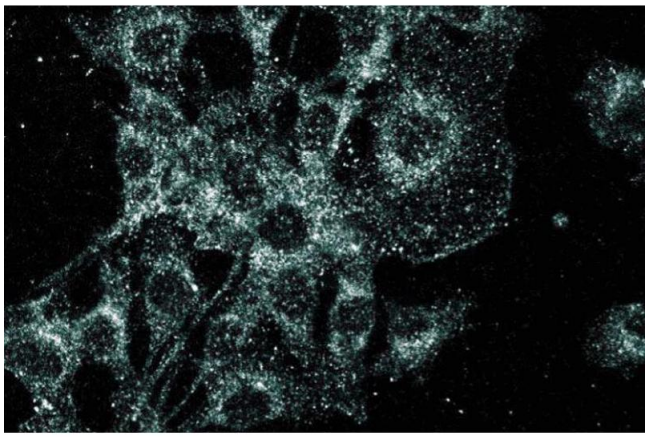
Lue, Brandin, Chan, Branton: "Two independent domains of hDlg are sufficient for subcellular targeting: the PDZ1-2 conformational unit and an alternatively spliced domain." in: **The Journal of cell biology**, Vol. 135, Issue 4, pp. 1125-37, (1997) (PubMed).

Lue, Marfatia, Branton, Chishti: "Cloning and characterization of hdlg: the human homologue of the Drosophila discs large tumor suppressor binds to protein 4.1." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 91, Issue 21, pp. 9818-22, (1994) (PubMed).



Western Blotting

Image 1. Western blot analysis of Dlg on an A431 cell lysate (Human epithelial carcinoma, ATCC CRL-1555). Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-Dlg antibody. Bands are observed to be migrating at 140 kDa, 95-97 kDa and 37 kDa.



Immunofluorescence

Image 2. Immunofluorescence staining of RSV-3T3 cells.