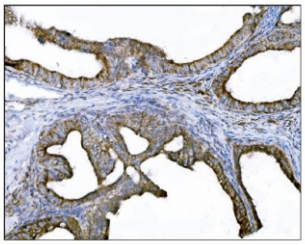
DLGAP1 Antibody / DAP-1 (RQ6470)

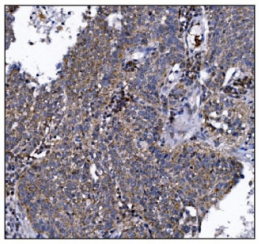
Catalog No.	Formulation	Size
RQ6470	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

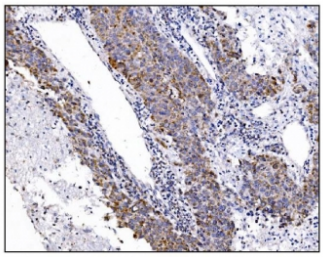
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O14490
Localization	Cytoplasmic
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Immunofluorescence: 5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This DLGAP1 antibody is available for research use only.



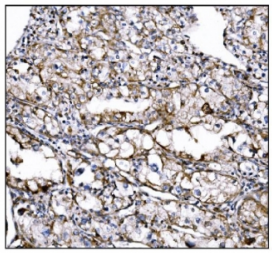
IHC staining of FFPE human ovarian cancer tissue with DLGAP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



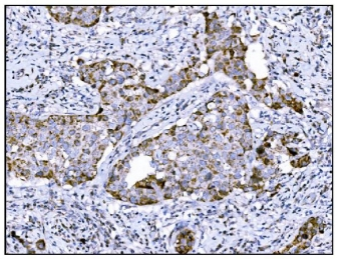
IHC staining of FFPE human lung cancer tissue with DLGAP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



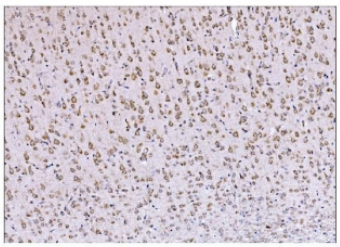
IHC staining of FFPE human liver cancer tissue with DLGAP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



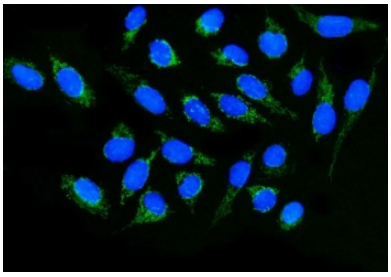
IHC staining of FFPE human renal clear cell carcinoma tissue with DLGAP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



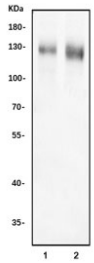
IHC staining of FFPE human breast cancer tissue with DLGAP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



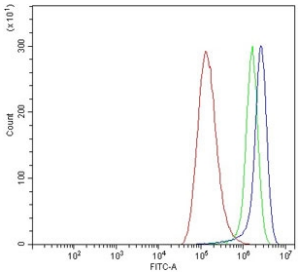
IHC staining of FFPE rat brain tissue with DLGAP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human U-2 OS cells with DLGAP1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) rat brain and 2) mouse brain tissue lysate with DLGAP1 antibody. Predicted molecular weight ~109 kDa but can be observed at up to ~130 kDa.



Flow cytometry testing of human A549 cells with DLGAP1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= DLGAP1 antibody.

Description

Disks large-associated protein 1 (DAP-1), also known as guanylate kinase-associated protein (GKAP), is a protein that in humans is encoded by the DLGAP1 gene. The neurotransmitter glutamate facilitates neuronal signalling at excitatory synapses. Glutamate is released from the presynaptic membrane into the synaptic cleft. Across the synaptic cleft glutamate binds to both ion channels and metabotropic glutamate receptors at the postsynapse, which expedite downstream signalling in the neuron. The postsynaptic density, a highly specialized matrix, which is attached to the postsynaptic membrane, controls this downstream signalling. The postsynaptic density also resets the synapse after each synaptic firing. It is composed of numerous proteins including a family of Discs large associated protein 1, 2, 3 and 4 (DLGAP1-4) that act as scaffold proteins in the postsynaptic density. They link the glutamate receptors in the postsynaptic membrane to other glutamate receptors, to signalling proteins and to components of the cytoskeleton. With the central localisation in the postsynapse, the DLGAP family seems to play a vital role in synaptic scaling by regulating the turnover of both ionotropic and metabotropic glutamate receptors in response to synaptic activity. DLGAP family has been directly linked to a variety of psychological and neurological disorders.

Application Notes

Optimal dilution of the DLGAP1 antibody should be determined by the researcher.

Immunogen

An E. coli-derived human protein (amino acids D17-Q319) was used as the immunogen for the DLGAP1 antibody.

Storage

After reconstitution, the DLGAP1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.