

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GKAP/DLGAP1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human DLGAP2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human GKAP/DLGAP1 Lys368-Glu472 Accession # O14490
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

DLGAP1 (Disks Large-associated protein 1; also SAPAP1, GKAP and SAP90 binding protein) is an intracellular, 117-130 kDa member of the SAPAP family of proteins. It is widely expressed (astrocytes, neurons, fibroblasts and epithelium), and serves as a platform for dynein-DGL1 interaction. This is important during cell migration where the centrosome must be positioned between the nucleus and direction of migration in response to microtubule formation under the protruding edge of the cell membrane. DLGAP1 first binds DLG-1 and then recruits dynein, with a resultant interaction that allows for microtubule anchoring and centrosome positioning. Human DLGAP1 is 977 amino acids (aa) in length. It contains multiple 14 aa acidic repeats, three Pro-rich segments, and at least 14 potential phosphorylation sites. Multiple potential splice variants are reported. In various combinations, there may be a 17, 27 and 31 aa substitution for aa 1-319, a deletion of either aa 531-540 or 531-558, a 24 aa substitution for aa 1-318, and a 13 aa substitution for aa 531-977. Most appear to generate 70-80 kDa isoforms in SDS-PAGE. Over aa 368-472, human and mouse DLGAP1 are identical in aa sequence.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.