

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 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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

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