

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human GKAP/DLGAP1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human DLGAP2 is observed.                                                                                                                    |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human GKAP/DLGAP1<br>Lys368-Glu472<br>Accession # O14490                                                                                                                                                                                |
| <b>Conjugate</b>          | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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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