

#### DESCRIPTION

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human/Rat                                                                                       |
| <b>Specificity</b>                                                                                                                                                                                      | Detects recombinant human DOCK1 in direct ELISAs. Detects human and rat DOCK1 in Western blots. |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Goat IgG                                                                             |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                       |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human DOCK1<br>Gly422-Ser666<br>Accession # Q14185          |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                 |
| <b>Formulation</b>                                                                                                                                                                                      | 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

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

DOCK1 (Dedicator of cytokinesis protein 1) is a member of the DOCK-A family, DOCK180 superfamily of proteins. Although its predicted molecular weight is 215 kDa, it runs anomalously at 180-190 kDa in SDS-PAGE. It is generally found in non-hematopoietic cell types, and transduces signals from cell membrane receptors by regulating the activity of the GTPases Rac-1 and -2. This impacts both cell migration and phagocytosis. Human DOCK1 is 1865 amino acids (aa) in length. It contains one protein-interaction SH3 domain (aa 9-70), a DHR-1 region that localizes DOCK1 to the plasma membrane and PI3 kinase (aa 422-664), a DHR-2 domain that binds to nucleotide-free GTPases and shows GEF activity (aa 1111-1616), and two SH3-binding motifs (aa 1799-1843). There are four potential phosphorylation sites and one isoform variant that shows a start site at Met114. Over aa 422-666, human DOCK1 shares 97% aa identity with mouse DOCK1.

#### PRODUCT SPECIFIC NOTICES

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