

**DESCRIPTION**

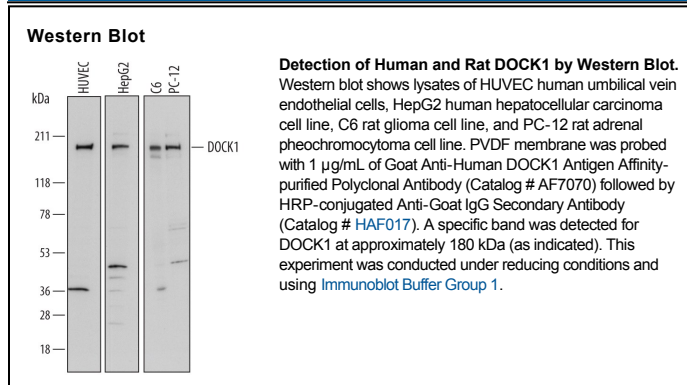
<b>Species Reactivity</b>	Human/Rat
<b>Specificity</b>	Detects recombinant human DOCK1 in direct ELISAs. Detects human and rat DOCK1 in Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human DOCK1 Gly422-Ser666 Accession # Q14185
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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.