

DESCRIPTION

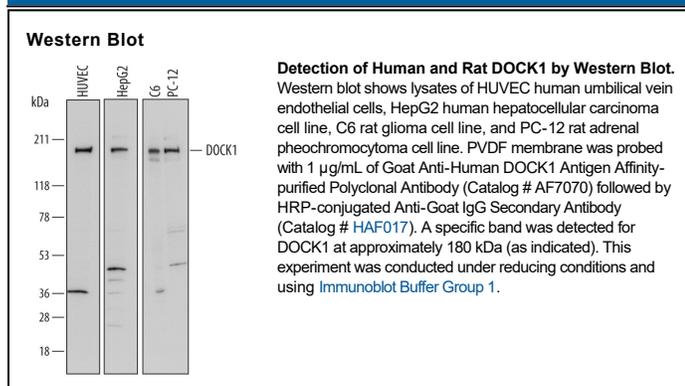
Species Reactivity	Human/Rat
Specificity	Detects recombinant human DOCK1 in direct ELISAs. Detects human and rat DOCK1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human DOCK1 Gly422-Ser666 Accession # Q14185
Formulation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

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.