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#4846

## DOCK180 (C4C12) Rabbit mAb

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IP	<b>Reactivity:</b> H M R	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 215	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #Q14185	<b>Entrez-Gene Id:</b> 1793
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### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation

#### Dilution

1:1000  
1:100

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

DOCK180 (C4C12) Rabbit mAb recognizes endogenous levels of total DOCK180 protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the carboxy-terminal sequence of human DOCK180.

### Background

DOCK180 and its partner, ELMO1, interact directly with one another to form an atypical two-part guanine nucleotide exchange factor (GEF) for the small GTPase Rac (1). Rac activation occurs in association with p130 Cas and Crk, which form a complex with DOCK180 that is targeted to focal adhesions (1,2). DOCK180 is also recruited to the plasma membrane by binding to phosphoinositides (3). ELMO1 may function as an inhibitor of proteasome-dependent degradation of DOCK180 at the plasma membrane to regulate reorganization of the actin cytoskeleton (4). Localized Rac activation allows actin nucleation via WAVE family proteins, signaling to integrins, formation of lamellipodia and filopodia, and regulation of processes such as phagocytosis and cell migration (5-7).

### Background References

- Brugnera, E. et al. (2002) *Nat. Cell Biol.* 4, 574-582.
- Matsuda, M. et al. (1996) *J. Biol. Chem.* 271, 14468-14472.
- Côté, J.F. et al. (2005) *Nat. Cell Biol.* 7, 797-807.
- Makino, Y. et al. (2006) *J. Cell Sci.* 119, 923-932.
- Takenawa, T. and Miki, H. (2001) *J. Cell Sci.* 114, 1801-1809.
- Albert, M.L. et al. (2000) *Nat. Cell Biol.* 2, 899-905.
- Gustavsson, A. et al. (2004) *J. Biol. Chem.* 279, 22893-22901.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat

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