**BACKGROUND**

Activation of protein kinase C (PKC) in platelets results in immediate phosphorylation of pleckstrin (previously called 40K or P47), the major PKC substrate in platelets. Pleckstrin contains a Ca\(^{2+}\)-binding ‘EF-hand’ structure and PKC phosphorylation sites at Ser-113 and Ser-117. The N and C termini of pleckstrin contain two pleckstrin homology domains (PH), which mediate protein-protein and protein-lipid interactions. Pleckstrin is highly expressed in human neutrophils as a 40–47 kDa protein. Pleckstrin is rapidly phosphorylated following treatment of neutrophils in response to inflammatory stimuli, probably by nonconventional PKC isoforms delta or zeta, which are expressed in human neutrophils. Phosphorylation by non-conventional PKC isoforms induces a conformational change in pleckstrin that promotes its interaction with membranes and/or with the cytoskeleton, serving to target proteins or lipids recognized by PH domains to sites where they can contribute to the microbicidal response.

**REFERENCES**


**SOURCE**

Pleckstrin (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Pleckstrin of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-20271 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Pleckstrin (D-13) is recommended for detection of Pleckstrin of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Pleckstrin siRNA (h): sc-106419, Pleckstrin siRNA (m): sc-152303, Pleckstrin shRNA Plasmid (h): sc-106419-SH, Pleckstrin shRNA Plasmid (m): sc-152303-SH, Pleckstrin shRNA (h) Lentiviral Particles: sc-106419-V and Pleckstrin shRNA (m) Lentiviral Particles: sc-152303-V.

Molecular Weight of Pleckstrin: 40 kDa.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.