SANTA CRUZ BIOTECHNOLOGY, INC.

PARD6G (N-15): sc-85097

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The Power to Question

BACKGROUND

PARD6G (partitioning defective 6 homolog γ) is a 376 amino acid adaptor protein that is involved in cell polarization and asymmetrical cell division processes. PARD6G contains one OPR domain, one PDZ (DHR) domain and one pseudo-CRIB domain. The PDZ and pseudo-CRIB domains are required for interaction with Rho small GTPases. Through its complex formation with PARD3G, PARD6G participates in the linking of GTP-bound Rho small GTPases to atypical protein kinase C (PKC) proteins. This assembly is involved in formation of normal tight junctions at epithelial cell-cell contacts. When atypical PKC and PARD6G are expressed with a constitutively active Rac, the proteins co-localize to the membrane ruffles, which are structures that occur at the leading edge of polarized cells during movement. Though widely expressed, PARD6G is found at highest levels in adult and fetal kidney.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PARD6G (human) mapping to 18q23; Pard6g (mouse) mapping to 18 E3.

SOURCE

PARD6G (N-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of PARD6G 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-85097 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PARD6G (N-15) is recommended for detection of PARD6G of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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); non cross-reactive with other PARD family members.

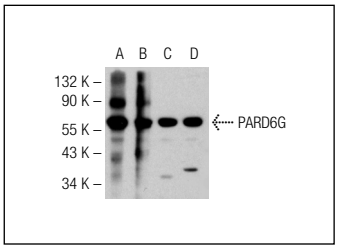
PARD6G (N-15) is also recommended for detection of PARD6G in additional species, including bovine and porcine.

Suitable for use as control antibody for PARD6G siRNA (h): sc-76050, PARD6G siRNA (m): sc-152025, PARD6G shRNA Plasmid (h): sc-76050-SH, PARD6G shRNA Plasmid (m): sc-152025-SH, PARD6G shRNA (h) Lentiviral Particles: sc-76050-V and PARD6G shRNA (m) Lentiviral Particles: sc-152025-V.

Molecular Weight of PARD6G: 41 kDa.

Positive Controls: mouse thymus extract: sc-2406, mouse spleen extract: sc-2391 or WI 38 whole cell lysate.

DATA



PARD6G (N-15): sc-85097. Western blot analysis of PARD6G expression in mouse thymus (**A**) and mouse spleen (**B**) tissue extracts and LADMAC (**C**) and WI 38 (**D**) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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.