SANTA CRUZ BIOTECHNOLOGY, INC.

DGK-κ (4G12): sc-517147

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Diacylglycerol kinase plays an important role in signal transduction through regulating the balance between two signaling lipids, diacylglycerol (DAG) and phosphatidic acid (PA). DGK-κ (diacylglycerol kinase κ), also known as DGKK, 142 kDa diacylglycerol kinase or diglyceride kinase κ, is a 1,271 amino acid protein belonging to the eukaryotic diacylglycerol kinase family. DGK-κ contains one DAGKc domain, one PH domain and two phorbol-ester/DAG-type zinc fingers. DGK-κ generates PA by phosphorylating DAG and is inhibited in response to hydrogen peroxide. A peripheral membrane protein, DGK-κ does not form homooligomers and is expressed in testis, with lower levels in placenta.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DGKK (human) mapping to Xp11.22.

SOURCE

DGK-κ (4G12) is a mouse monoclonal antibody raised against amino acids 1171-1271 representing partial length DGK-κ of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

DGK-κ (4G12) is recommended for detection of DGK-κ of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

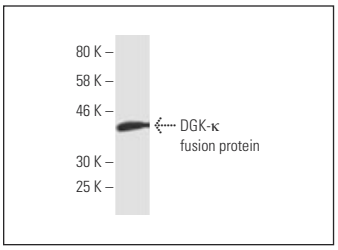
Suitable for use as control antibody for DGK-κ siRNA (h): sc-91229, DGK-κ shRNA Plasmid (h): sc-91229-SH and DGK-κ shRNA (h) Lentiviral Particles: sc-91229-V.

Molecular Weight of DGK-κ: 142 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



DGK-κ (4G12): sc-517147. Western blot analysis of human recombinant DGK-κ fusion protein.

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 for detailed protocols and support products.