

Prokineticin-2 (K-17): sc-48069

BACKGROUND

Prokineticin-2 (PK2) is a cysteine-rich secreted protein that is expressed in the suprachiasmatic nucleus (SCN) with receptors located in the critical autonomic control centers of the brain. It has a depolarizing effect on neurons expressing the receptor. PK2 is predominantly controlled by the endogenous circadian clock, but light also plays a modulatory role. PK2 functions as a critical SCN output molecule responsible for circadian locomotor rhythms. PK2 expression is high during the day, and responsive to nocturnal light pulses. PK2 also functions as a chemoattractant for subventricular zone-derived neuronal progenitors.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Prok2 (mouse) mapping to 6 D3.

SOURCE

Prokineticin-2 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Prokineticin-2 of mouse origin.

STORAGE

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

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, Ready P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Prokineticin-2 (K-17) is recommended for detection of Prokineticin-2 isoform 1 of mouse and rat 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 Prokineticin-2 siRNA (m): sc-61410, Prokineticin-2 shRNA Plasmid (m): sc-61410-SH and Prokineticin-2 shRNA (m) Lentiviral Particles: sc-61410-V.

Molecular Weight of Prokineticin-2: 9 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.

SELECT PRODUCT CITATIONS

- Maftai, D., Marconi, V., Florenzano, F., Giancotti, L.A., Castelli, M., Moretti, S., Borsani, E., Rodella, L.F., Balboni, G., Luongo, L., Maione, S., Sacerdote, P., Negri, L. and Lattanzi, R. 2014. Controlling the activation of the Bv8/prokineticin system reduces neuroinflammation and abolishes thermal and tactile hyperalgesia in neuropathic animals. *Br. J. Pharmacol.* 171: 4850-4865.

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.