BACKGROUND

The melatonin receptors, MEL-1A-R and MEL-1B-R, are members of the superfamily of guanine nucleotide-binding regulatory protein (G protein)-coupled receptors. The melatonin receptors are activated by the hormone melatonin (Mel), which is secreted by the pineal gland at night as part of the circadian clock. MEL-1A-R is thought to be involved in pacing the biological clock. Both MEL-1A-R and MEL-1B-R are implicated in controlling cellular growth in response to melatonin. MEL-1B-R is an integral membrane protein expressed in retina and, to a lesser extent, in brain and hippocampus. Functional studies of NIH/3T3 cells stably expressing the MEL-1B-R melatonin receptor indicate that it is coupled to inhibition of adenylyl cyclase.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: MTNR1B (human) mapping to 11q14.3; Mtnr1b (mouse) mapping to 9 A2.

SOURCE

MEL-1B-R (T-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MEL-1B-R of mouse 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-13177 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MEL-1B-R (T-18) is recommended for detection of MEL-1B-R of mouse, rat 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).

MEL-1B-R (T-18) is also recommended for detection of MEL-1B-R in additional species, including equine and porcine.

Suitable for use as control antibody for MEL-1B-R siRNA (h): sc-40114, MEL-1B-R siRNA (m): sc-149365, MEL-1B-R shRNA Plasmid (h): sc-40114-SH, MEL-1B-R shRNA Plasmid (m): sc-149365-SH, MEL-1B-R shRNA (h) Lentiviral Particles: sc-40114-V and MEL-1B-R shRNA (m) Lentiviral Particles: sc-149365-V.

Molecular Weight of MEL-1B-R: 36 kDa.

SELECT PRODUCT CITATIONS


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.