**BACKGROUND**

Melatonin (Mel), a hormone secreted by the pineal gland, is expressed at night in response to the circadian clock. Melatonin is thought to be involved in regulating reproductive physiological development and the progression of sexual maturation, and it is also thought to play a role in tumorogenesis. 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. Signaling through the melatonin receptors inhibits adenylate cyclase and stimulates phospholipase C upon activation of pertussis toxin (PTX)-sensitive G proteins. MEL-1A-R, may be involved in pacing the biological clock. However, both MEL-1A-R and MEL-1B-R are implicated in controlling cellular growth in response to melatonin.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: MTNR1A (human) mapping to 4q35.2.

**SOURCE**

MEL-1A-R (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of MEL-1A-R 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-13179 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

MEL-1A-R (N-20) is recommended for detection of MEL-1A-R 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)], 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 MEL-1A-R siRNA (h): sc-35917, MEL-1A-R shRNA Plasmid (h): sc-35917-SH and MEL-1A-R shRNA (h) Lentiviral Particles: sc-35917-V.

Molecular Weight of MEL-1A-R: 37 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410 or IMR-32 cell lysate: sc-2409.

**RESEARCH USE**

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

**DATA**

MEL-1A-R (N-20): sc-13179. Western blot analysis of MEL-1A-R expression in SK-N-SH (A) and IMR-32 (B) whole cell lysates.

MEL-1A-R (N-20): sc-13179. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

**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.

Try MEL-1A-R (B-10): sc-390328 or MEL-1A/B-R (B-8): sc-398788, our highly recommended monoclonal alternatives to MEL-1A-R (N-20).