



Affinity-Purified Goat Anti-human PER1 Antibody

ORDERING INFORMATION

Catalog Number: AF4565
Lot Number: ZPC01
Size: 100 µg
Storage: -20° C
Specificity: human PER1
Immunogen: *E. coli*-derived rhPER1
(aa 159 - 365)
Ig Type: goat IgG
Application: Immunohistochemistry

Background

PER1 (Period circadian protein 1; also known as RIGUI) is a 188 kDa member of the PER family of molecules. It apparently influences circadian rhythms by interacting with, and stabilizing, other circadian regulatory proteins. PER1 undergoes extensive phosphorylation that may regulate its intracellular localization. Human PER1 is 1290 amino acids (aa) in length. It contains a bHLH region (aa 122 - 173), an extended PAS domain (aa 183 - 463) plus an NLS and NES. Multiple splice forms exist. Two show deletions (aa 741 - 820 and aa 209 - 217), while two show aa substitutions: 9 aa for the C-terminal 1005 aa, and 29 aa for the C-terminal 747 amino acids. Over aa 159 - 365, human PER1 is 96% identical to mouse, rat, and dog PER1.

Preparation

Goat antibodies were raised against purified, *E. coli*-derived recombinant human PER1 protein (rhPER1; aa 159 - 365; Accession # O15534). Polyclonal antibody was affinity-purified on a column derivatized with the recombinant protein and further purified by isolating the IgG fraction.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute in PBS containing 0.02% NaN₃.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody detects human PER1 in direct ELISAs and immunohistochemistry experiments. Reactivity with other species has not been determined.

Application

Immunohistochemistry - This antibody was used at a concentration of 3 - 10 µg/mL with the appropriate secondary reagents to detect PER1 in paraffin-embedded sections of normal human cortex and hypothalamus. For chromogenic detection of labeling, the use of R&D Systems Cell and Tissue Staining Kits (CTS Series) is recommended.

Optimal dilutions should be determined by the individual laboratory.

For immunohistochemistry images, please refer to our website at <http://www.RnDSystems.com/ihc>.