## **Bioworld Technology CO., Ltd.**



## **APLNR (C181) Peptide**

Cat No.: BS2584P

## Background

The apelin receptor (APLNR) is a G protein-coupled integral membrane protein exhibiting a hypothalamic distribution in brain, glial cells, astrocytes and neuronal subpopulations. APLNR is bound by its cognate neuropeptide ligand, apelin, promoting receptor internalization to the nucleus and dose-dependent inhibition of forskolin-induced cAMP production. However, deletion studies of the apelin agonist have shown that internalization is not mandatory for decreasing vasopressin release, a hypotensive action of APLNR signaling. Further evidence for functional dissociation of APLNR stimulation and internalization was exhibited in vitro using mutational studies of a nuclear localization signal sequence. These findings may suggest the presence of multiple, functionally-differing conformational states for the receptor. Stress studies in rodents have shown APLNR is under negative regulation by glucocorticoids and may be involved in controlling hypothalamic function. APLNR also functions as an alternate coreceptor with CD4 for HIV-1 infection.

**Swiss-Prot** 

P35414

## Applications

Blocking

Specificity

This peptide can be used with studies using BS2584 APLNR (C181) pAb.

**Purification & Purity** 

Synthetic peptide APLNR (C181). (Note: the amino acid sequence is proprietary). The purity is > 98%.

**Product** 

1 mg/ml in DI water.

Storage & Stability

Store at  $4 \,^{\circ}{\rm C}$  short term. Aliquot and store at  $-20 \,^{\circ}{\rm C}$  long term. Avoid freeze-thaw cycles.

**Research Use** 

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