

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **Orexin Receptor 1 polyclonal antibody**

Catalog: BS67495 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

Orexin Receptor 1 or Hypocretin G-protein-coupled receptor-1 (OX1R and HCRTR1, respectively) is 1 of 2 orexin receptors expressed in the brain. Neurons in the hypothalamus express orexin receptors that bind to neuropeptides to modulate neuronal function. The neuropeptides that bind orexin receptors include Orexin-A (hypocretin-1) and Orexin-B (hypocretin-2). Orexin-A binds with a higher affinity to HCRTR1, whereas Orexin-B binds more selectively to HCRTR2. Activation of HCRTR1 by its cognate neuropeptide drives downstream signaling events regulating several cellular processes, including increases in cytoplasmic Ca2+ levels . HCRTR1 has been linked to many behavioral processes, including wakefulness as well as migraines and mood disorders. The link of the orexin system to sleep and mood disorders make it a potential therapeutic target to combat insomnia, depression, anxiety, and addiction.

#### **Product:**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

#### **Molecular Weight:**

~ 55 kDa

#### **Swiss-Prot:**

O43613

#### **Purification&Purity:**

The antibody was purified by immunogen affinity chromatography.

## **Applications:**

WB (1/500 - 1/1000), IF/ICC (1/50 - 1/200)

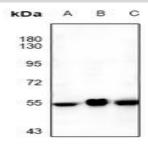
## Storage&Stability:

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

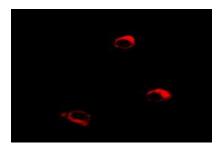
#### **Specificity:**

Recognizes endogenous levels of Orexin Receptor 1 protein.

### **DATA:**



Western blot analysis of Orexin Receptor 1 expression in U87MG (A), rat brain (B), mouse brain (C) whole cell lysates.



Immunofluorescent analysis of Orexin Receptor 1 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

## Note:

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

## Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151