

# **Product datasheet for TA328791**

**Cnr2 Rabbit Polyclonal Antibody** 

### **Product data:**

**Product Type:** Primary Antibodies

**Applications:** IHC, WB

Recommended Dilution: WB: 1:200-1:2000; IHC: 1:100-1:3000

**Reactivity:** Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Peptide (C)DRQVPGIARMRLDVR, corresponding to amino acidâ residues 228-242 of rat CB2R.

3rd Intracellular loop.

Formulation: Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to

CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate

buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.

**Reconstitution Method:** Add 50 ul double distilled water (DDW) to the lyophilized powder.

**Purification:** Affinity purified on immobilized antigen.

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** cannabinoid receptor 2

Database Link: NP 065418

Entrez Gene 57302 Rat

Q9QZN9



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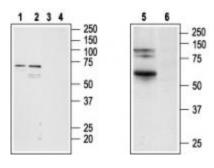


#### Background:

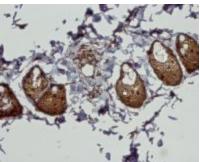
Cannabinoids have been used as pain relievers in eastern medicine for many years. To date, two specific cannabinoid receptors have been identified: the Cannabinoid Receptor 1 (CB1R) and the Cannabinoid Receptor 2 (CB2R). The cannabinoid receptors can be distinguished by their amino acid sequence, signaling mechanisms and tissue distribution. Both receptors belong to the G-protein coupled receptor superfamily and are coupled to Gi/O G protein. The CB2R is highly expressed in cells of the immune system such as macrophages, lymphocytes natural killer cells and mast cells but has also been shown to be expressed, by both, in situhybridization and in immunohistochemistry, in spleen, thymus, and pancreas. CB2R expression in brain is still much less characterized than that of CB1R. Recently, it was demonstrated that CB2R is expressed in brain and might have role in controlling fundamental processes such as proliferation and survival of neural cells. Overexpression of CB2R was reported in several cancers such as prostate, glioma and acute myeloid leukemias. In human astrocytoma a direct relationship between CB2R expression and tumor malignancy was demonstrated. Activation of CB2R, in vivo, by its agonist JWH-133, completely blocked cell growth. In C6 glioma it was shown that activation of the CB2R by JWH-133 resulted in the internalization of only the CB2R, and not CB1R leading to apoptosis of the cells. This may well be a new approach for the treatment of glioma.

**Synonyms:** CB-2; CB2; CX5; hCB2

## **Product images:**



Western blot analysis of RBL (lanes 1, 3), C6 (lanes 2, 4) and rat lung (lanes 5, 6) lysates: 1, 2, 5. Anti-Cannabinoid Receptor 2 antibody, (1:200). 3, 4, 6. Anti-Cannabinoid Receptor 2 antibody, preincubated with the control peptide antigen.



Expression of CB2R in rat dermis. Immunohistochemical staining of paraffin embedded section of rat dermis using Anti-Cannabinoid Receptor 2 antibody, (1:100). CB2R is expressed in sebaceous glands and ducts of sweat glands in the reticular dermis. Hematoxilin is used as the counterstain.