



## Anti-Dopamine Receptor D2 (DRD2), Rabbit-Polyclonal Antibody

**Catalog No.** GB-30082  
**Antigen species:** Human  
**Host species:** Rabbit

**Quantity:** 100 $\mu$ g  
**Reactivity:** Human  
**Form:** Peptide affinity purified antibody

**Applications:** ELISA

### Target description

Homo sapiens dopamine receptor D2 (DRD2) gene encodes the D2 subtype of the dopamine receptor. This G-protein coupled receptor inhibits adenylyl cyclase activity. A missense mutation in this gene causes myoclonus dystonia; other mutations have been associated with schizophrenia. Alternative splicing of this gene results in two transcript variants encoding different isoforms. A third variant has been described, but it has not been determined whether this form is normal or due to aberrant splicing.

### Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide located on the putative extracellular domain of human DRD2.

### Application

The antibody specificity was assayed by ELISA with the synthetic DRD2 peptide antigen. The antibody titer is more than 500K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/10,000 dilution for ELISA, 1/2,000 dilution for Western blot analysis (WB) of recombinant protein, 1/800 dilution for tissue extracts or cell lysates, 1/100 dilution for immuno-histochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

### Related Products

1. Anti-Dopamine receptor D1(DRD1), pAb (GB-30081)

Ab dilution	Pre-bleed	Purified-Ab
1:100	1.156	2.896
1:1,000	0.274	2.602
1:10,000	0.079	1.990
1:100,000	0.052	0.685
1:1,000,000	0.050	0.140
Titer		971.8K

Antigen is coated on EIA strips at 1 $\mu$ g per well.

### ELISA Protocol

Add 200 $\mu$ l of blocking buffer and then wash wells with PBST buffer. Antiserum or peptide specific purified antibody GB-30082 is diluted in series as  $10^2 \sim 10^6$  folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody is positive at >2 folds of ABS of control/Pre-Immune serum.

### Storage

It is supplied as peptide affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1 $\times$ PBS). Store at 4 $^{\circ}$ C for short-term application. For long-term storage, aliquot and store at -20 $^{\circ}$ C.

### References

1. Perez, V., Catafau, A.M., Corripio, I., Martin, J.C. and Alvarez, E. Preliminary evidence of striatal D2 receptor density as a possible biological marker of prognosis in naive schizophrenic patients. *Neuropsychopharmacol.* 27 (5): 767-770, 2003.
2. Kudlacek, O., Just, H., Korkhov, V.M., Vartian, N., Klinger, M., Pankevych, H., Yang, Q., Nanoff, C., Freissmuth, M. and Boehm, S. The human D2 dopamine receptor synergizes with the A2A adenosine receptor to stimulate adenylyl cyclase in PC12 cells. *Neuropsychopharmacol.* 28 (7): 1317-1327, 2003.

FOR RESEARCH USE ONLY AND NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE