For Research Use Only

## GABRA2 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number:83057-2-PBS



**Purification Method:** 

CloneNo.:

230158E6

Protein A purification

**Basic Information** 

Catalog Number: GenBank Accession Number:

83057-2-PBS NM\_000807

Size: Genel D (NCBI): 100ug , Concentration: 1mg/ml by 2555

Nanodrop; UNIPROT ID:
Source: P47869
Rabbit Full Name:

Isotype: gamma-aminobutyric acid (GABA) A

IgG receptor, alpha 2
Immunogen Catalog Number: Calculated MW:
AG29301 51 kDa

Observed MW: 50-51 kDa

**Applications** 

**Tested Applications:** 

WB, FC (Intra), Cytometric bead array, Indirect ELISA

Species Specificity: human, mouse, rat

**Product Information** 

83057-2-PBS targets GABRA2 as part of a matched antibody pair:

MP00067-2: 83057-3-PBS capture and 83057-2-PBS detection (validated in Cytometric bead array)

MP00067-3: 83057-2-PBS capture and 83057-4-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

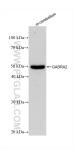
**Background Information** 

GABRA2 (gamma-aminobutyric acid type A receptor subunit alpha2), also known as DEE78. It is expected to be located in cell membrane, and the protein is highly expressed in brain. The protein is a ligand-gated chloride channel, which is a component of the heteropentameric receptor for GABA, the major inhibitory neurotransmitter in the brain (PubMed:29961870). It also plays an important role in the formation of functional inhibitory GABAergic synapses in addition to mediating synaptic inhibition as a GABA-gated ion channel (PubMed:29961870). The calculated molecular weight of GABRA2 is 51 kDa.

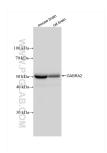
Storage

Storage: Store at -80°C. Storage Buffer: 100% PBS pH 7.3

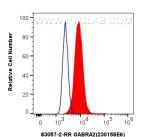
## Selected Validation Data



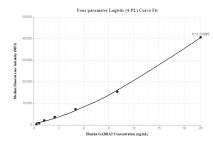
mouse cerebellum tissue were subjected to SDS PAGE followed by western blot with 83057-2-RR (GABRA2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83057-2-PBS in a different storage buffer formulation.



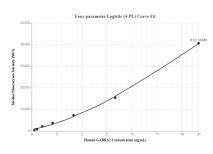
Various lysates were subjected to SDS PAGE followed by western blot with 83057-2-RR (GABRA2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83057-2-PBS in a different storage buffer formulation.



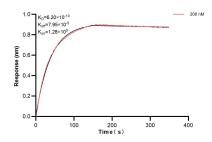
1x10^6 HeLa cells were intracellularly stained with 0.25 ug GABRA2 Recombinant antibody (83057-2-RR, Clone:230158E6) and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83057-2-PBS in a different storage buffer formulation.



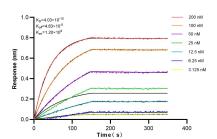
Cytometric bead array standard curve of MP00067-2, GABRA2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83057-3-PBS. Detection antibody: 83057-2-PBS. Standard: Ag29301. Range: 0.312-20 ng/mL



Cytometric bead array standard curve of MP00067-3, GABRA2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83057-2-PBS. Detection antibody: 83057-4-PBS. Standard: Ag29301. Range: 0.312-20 ng/mL



Biolayer interferometry (BLL) kinetic assay of 83057-2-PBS against Human GABRA2 was performed. The affinity constant is 0.62 nM.



Biolayer interferometry (BLL) kinetic assays of 83057-2-RR against Human GABRA2 were performed. The affinity constant is 0.403 nM.