

For Research Use Only

# GABRA2 Recombinant antibody, PBS Only (Detector)

Catalog Number: 83057-4-PBS



## Basic Information

<b>Catalog Number:</b> 83057-4-PBS	<b>GenBank Accession Number:</b> NM_000807	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2555	<b>CloneNo.:</b> 230158H5
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P47869	
<b>Isotype:</b> IgG	<b>Full Name:</b> gamma-aminobutyric acid (GABA) A receptor, alpha 2	
<b>Immunogen Catalog Number:</b> AG29301	<b>Calculated MW:</b> 51 kDa	
	<b>Observed MW:</b> 50-51 kDa	

## Applications

**Tested Applications:**  
FC (Intra), Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human

## Product Information

83057-4-PBS targets GABRA2 as part of a matched antibody pair:

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.

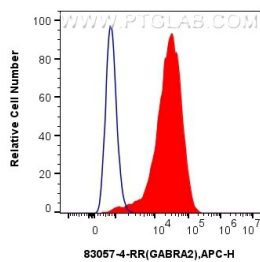
## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS only

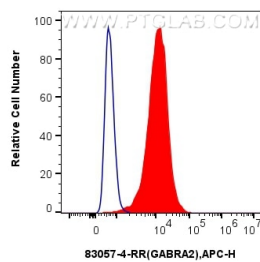
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

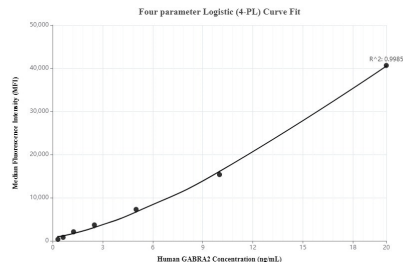
Selected Validation Data



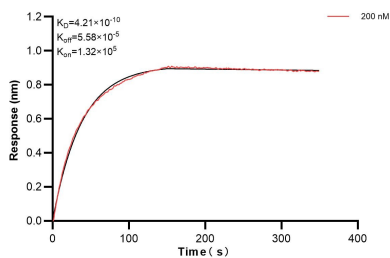
1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug Anti-Human GABRA2 (83057-4-RR, Clone:230158H5) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83057-4-PBS in a different storage buffer formulation.



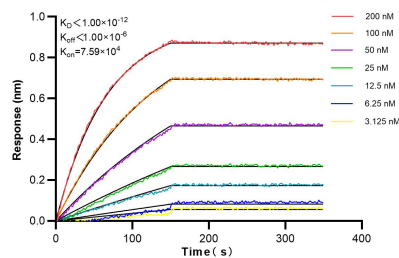
1x10<sup>6</sup> A549 cells were intracellularly stained with 0.25 ug Anti-Human GABRA2 (83057-4-RR, Clone:230158H5) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83057-4-PBS in a different storage buffer formulation.



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 (BLI) kinetic assay of 83057-4-PBS against Human GABRA2 was performed. The affinity constant is 0.421 nM.



Biolayer interferometry (BLI) kinetic assays of 83057-4-RR against Human GABRA2 were performed. The affinity constant is below 1 pM.