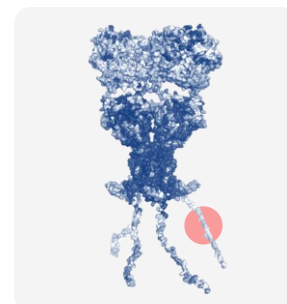


Anti-GluA2 rabbit recombinant monoclonal antibody



The **AMPA receptor subunit GluA2** is a key component of ionotropic glutamate receptors that mediate fast excitatory synaptic transmission in the central nervous system. AMPA receptors are tetrameric ion channels composed of combinations of GluA1–GluA4 subunits. GluA2 is highly expressed throughout the adult mammalian brain and plays a crucial role in determining the functional properties of AMPA receptors. Notably, the presence of GluA2 renders AMPA receptor channels largely impermeable to Ca^{2+} ions, making it an essential regulator of excitatory synaptic signaling and neuronal calcium homeostasis. Changes in GluA2 expression have been implicated in neurological conditions such as ischemia, neurodegeneration, and addiction-related plasticity¹. We offer rabbit recombinant monoclonal antibodies against GluA2 (KD < 15 nM), as well as polyclonal antibodies. These antibodies are ideally suited for applications such as Western blot, Immunoprecipitation, or ELISA.

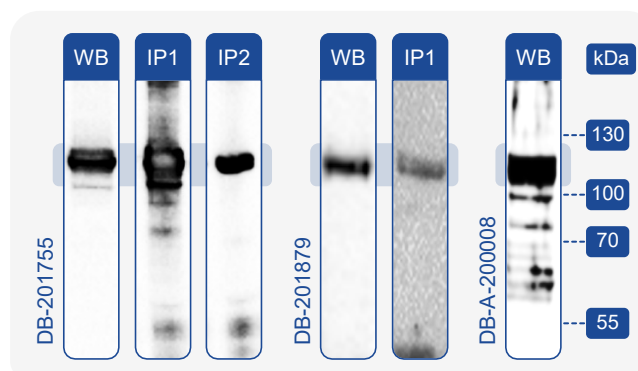


Antibody specification

Target GluA2	Specificity Human, Mouse, Rat, Pig	Host Rabbit	Conjugation Upon request
Target type Protein	Isotype IgG-Kappa 1	Expression system Mammalian	Field Neuroscience
Immunogen GluA2 specific peptide conjugated to VLP	Clonality Monoclonal (polyclonal)	Concentration 1 mg/ml	Applications <ul style="list-style-type: none">Western blotImmunoprecipitationELISAIC/IHC not tested
Epitope C-terminal domain VAKNPNQINPSSSQNS	Class Recombinant	Storage buffer PBS	

Clone information

Clone number	GluA2 K _D , nM rat	GluA2 K _D , nM (X-reactivity, %) human, mouse, pig	GluA3 K _D , nM (X-reactivity, %)
DB-201755 Monoclonal	14.8 ± 4.2	299.2 ± 25.3 (4.9 ± 1.5)	3506 ± 663 (0.42 ± 0.14)
DB-201879 Monoclonal	7.6 ± 1.4	990 ± 730 (0.77 ± 0.59)	N. D.
DB-A-200008 Polyclonal	71 ± 66*	278 ± 183* (25.5 ± 16.8)	7862 ± 6251* (0.9 ± 0.7)



* The data are based on the IC50 value.

Literature

1. Hansen K.B., Wollmuth L.P., Bowie D. *et al.* Structure, Function, and Pharmacology of Glutamate Receptor Ion Channels. *Pharmacol. Rev.* 73(4):298-487 (2021).

- WB** Immunodetection of recombinant GluA2 subunit from HEK293 cell lysate.
- IP1** Immunoprecipitation of recombinant GluA2 subunit from HEK293 cell lysate using DB antibody. Detection by anti-GluA2 rabbit polyclonal antibody SAB4501295 (Sigma).
- IP2** Immunoprecipitation of GluA2 subunit from pig brain using DB antibody. Detection by anti-GluA2 rabbit polyclonal antibody SAB4501295 (Sigma).

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