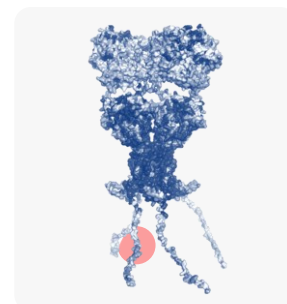


Anti-GluA3 rabbit recombinant monoclonal antibody



The **AMPA receptor subunit GluA3** 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 assembled from combinations of GluA1–GluA4 subunits. GluA3 is broadly expressed across multiple brain regions, including the cortex, hippocampus, and striatum, where it contributes to heterotetrameric AMPA receptor complexes. The relative abundance of GluA3 can influence receptor composition and plays a role in fine-tuning excitatory synaptic signaling. Altered GluA3 expression has been associated with neurological conditions, including neurodegenerative diseases and epilepsy¹. We provide rabbit recombinant monoclonal antibodies against GluA3 with high binding affinity ($K_D < 300$ pM), as well as polyclonal antibodies. These antibodies are ideally suited for applications such as Western blot, Immunoprecipitation, or ELISA.



Antibody specification

Target
GluA3

Target type
Protein

Immunogen
GluA3 specific peptide conjugated to VLP

Epitope
C-terminal domain
NTQNFKPAPATNTQ

Specificity
Human, Mouse, Rat,
Pig

Isotype
IgG-Kappa 1

Clonality
Monoclonal (polyclonal)

Class
Recombinant

Host
Rabbit

Expression system
Mammalian

Concentration
1 mg/ml

Storage buffer
PBS

Conjugation
Upon request

Field
Neuroscience

Applications

- Western blot
- Immunoprecipitation
- ELISA
- IC/IHC not tested

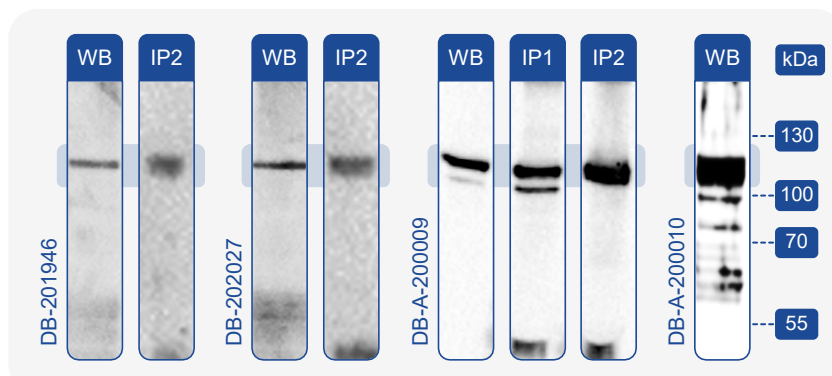
Clone information

Clone number	GluA3 K_D , pM rat, human, mouse, pig	GluA2 K_D , pM (X-reactivity, %)
DB-201946 Monoclonal	260 ± 10	N. D.
DB-202027 Monoclonal	760 ± 160	N. D.
DB-A-200009 Polyclonal	60 ± 35 × 10 ^{3*}	5.8 ± 3.1 × 10 ^{6*} (1 ± 0.6)
DB-A-200010 Polyclonal	19 ± 9 × 10 ^{3*}	4.8 ± 2.8 × 10 ^{6*} (0.4 ± 0.2)

* 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 GluA3 subunit from HEK293 cell lysate.

IP1 Immunoprecipitation of recombinant GluA3 subunit from HEK293 cell lysate using DB antibody. Detection by anti-GluA2/3 rabbit polyclonal antibody SAB4501295 (Sigma).

IP2 Immunoprecipitation of GluA3 subunit from pig brain using DB antibody. Detection by anti-GluA2/3 rabbit polyclonal antibody SAB4501295 (Sigma).

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