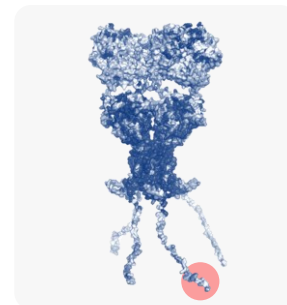


# Anti-GluA1 rabbit recombinant monoclonal antibody



The AMPA receptor subunit GluA1 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 the subunits GluA1–GluA4. GluA1 is widely expressed in the mammalian brain, particularly in the cortex and hippocampus. GluA1-containing receptors play a critical role in synaptic plasticity, including activity-dependent trafficking during long-term potentiation (LTP), a fundamental mechanism underlying learning and memory. Alterations in GluA1 expression have been associated with changes in neuronal excitability and various neurological disorders<sup>1</sup>. We offer rabbit recombinant monoclonal antibodies against GluA1 with high binding affinity ( $K_D < 500$  pM), as well as polyclonal antibodies. These antibodies are ideally suited for applications such as Western blot, Immunoprecipitation, or ELISA.

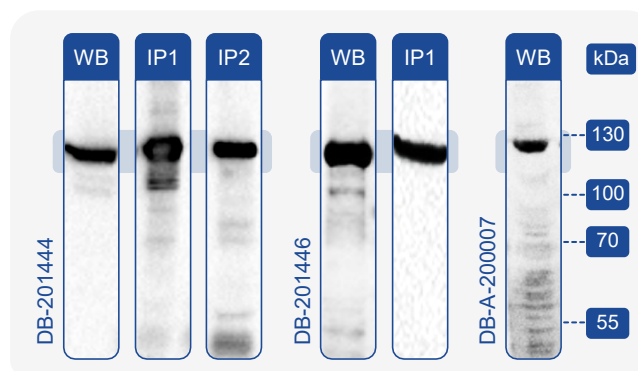


## Antibody specification

<b>Target</b> GluA1	<b>Specificity</b> Human, Mouse, Rat, Pig	<b>Host</b> Rabbit	<b>Conjugation</b> Upon request
<b>Target type</b> Protein	<b>Isotype</b> IgG-Kappa 1	<b>Expression system</b> Mammalian	<b>Field</b> Neuroscience
<b>Immunogen</b> GluA1 specific peptide conjugated to VLP	<b>Clonality</b> Monoclonal (polyclonal)	<b>Concentration</b> 1 mg/ml	<b>Applications</b> <ul style="list-style-type: none"><li>Western blot</li><li>Immunoprecipitation</li><li>ELISA</li><li>IC/IHC not tested</li></ul>
<b>Epitope</b> C-terminal domain SHSSGMPLGATGL	<b>Class</b> Recombinant	<b>Storage buffer</b> PBS	

## Clone information

Clone number	GluA1 $K_D$ , pM human, rat, mouse	GluA1 $K_D$ , pM (X-reactivity, %) pig	GluA4 $K_D$ , pM (X-reactivity, %)
<b>DB-201444</b> Monoclonal	160 ± 40	200 ± 20 (81 ± 21)	3.7 ± 0.6 × 10 <sup>6</sup> (0.0044 ± 0.0012)
<b>DB-201446</b> Monoclonal	420 ± 170	370 ± 180 (110 ± 70)	10.0 ± 6.0 × 10 <sup>6</sup> (0.0041 ± 0.0029)
<b>DB-A-200007</b> Polyclonal	888 ± 322*	/	5.4 ± 0.21 × 10 <sup>6</sup> * (0.017 ± 0.001)



\* 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).

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