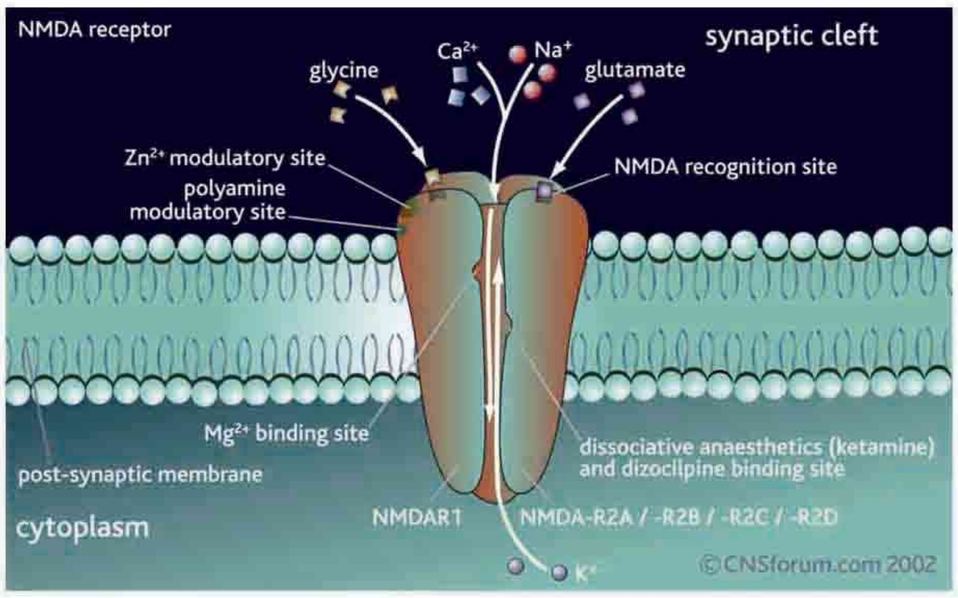
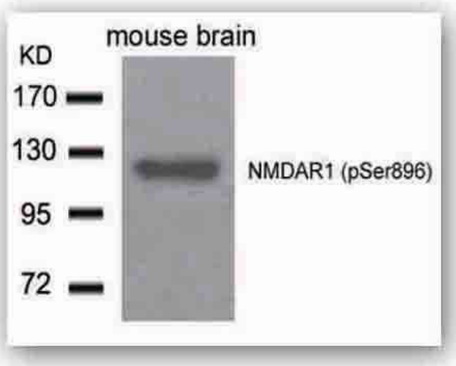
Neurotransmitter Receptors



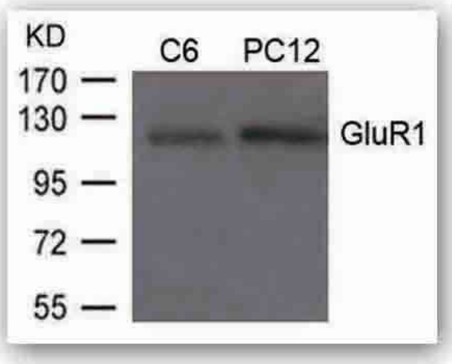
L-glutamate (Glu) acts as an excitatory neurotransmitter at many synapses in the central nervous system(CNS). AMPA- (α-amino-3-hydroxy-5-methyl-4-isoxazoleprop -ionic acid), kainite-, and NMDA- (N-methyl-D-aspartate) receptors are the three main families of ionotropic glutamate-gated ion channels. AMPA receptors (AMPARs) are comprised of four subunits (GluR 1-4), which assemble as homo- or hetero-tetramers to mediate the majority of fast excitatory transmissions in the CNS. AMPARs are implicated in synapse formation, stabilization, and plasticity .NMDA receptors consist of NR1 subunits combined with one or more NR2 (A-D) or NR3 (A-B) subunits. The ligand-gated channel is permeable to cations including Ca2+, and at resting membrane potentials NMDA receptors are inactive due to a voltage-dependent blockade of the channel pore by Mg2+. NMDA receptor activation, which requires binding of glutamate and glycine, leads to an influx of Ca2+ into the postsynaptic region where it activates several signaling cascades, including pathways leading to the induction of long-term potentiation (LTP) and depression (LTD). NMDA receptors have a critical role in excitatory synaptic transmission and plasticity in the CNS. They govern a range of physiological conditions including neurological disorders caused by excitotoxic neuronal injury, psychiatric disorders and neuropathic pain syndromes.

Cat. No.	Product name	Host and clonality	Reactivity	application
11261	**GluR1 (phospho-Ser849) Antibody**	Rabbit Polyconal Ab	Human Mouse Rat	WB
11575	**GluR1 (phospho-Ser836) Antibody**	Rabbit Polyconal Ab	Human Mouse Rat	WB
11292	**Glutamate receptor 2 (Precursor) (phospho-Ser880) Antibody**	Rabbit Polyconal Ab	Human Mouse Rat	WB
21253	**GluR1 (Ab-849) Antibody**	Rabbit Polyconal Ab	Human Mouse Rat	WB
21575	**GluR1 Antibody**	Rabbit Polyconal Ab	Human Mouse Rat	WB
21284	**Glutamate receptor 2 (Precursor) (Ab-880) Antibody**	Rabbit Polyconal Ab	Human Mouse Rat	WB
11104	**NMDAR1 (Phospho-Ser896) Antibody**	Rabbit Polyconal Ab	Human Mouse Rat	WB
21133	**NMDAR1 (Ab-896) Antibody**	Rabbit Polyconal Ab	Human Mouse	WB

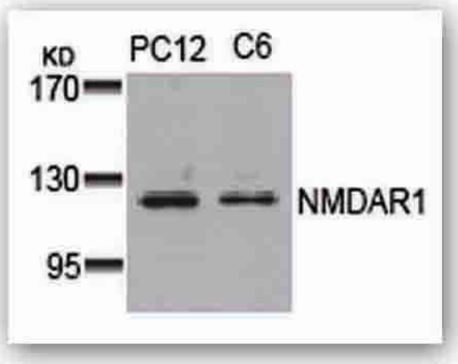
Western blot analysis of extracts from Rat brain tissue using GluR1(phospho-Ser849) Antibody **#11261**.



Western blot analysis of extracts from Mouse Brain tissue using NMDAR1(Phospho-Ser896) Antibody **#11104**.



Western blot analysis of extracts from C6 and PC12 cells using GluR1(Ab-849) Antibody **#21253**.



Western blot analysis of extracts from PC12 and C6 cells using NMDAR1(Ab-896) Antibody **#21133**.