

Resource Summary Report

Generated by [NIF](#) on Jul 30, 2026

pCAG-HA-Nrxn1beta AS4(-)

RRID:Addgene_59409

Type: Plasmid

Proper Citation

RRID:Addgene_59409

Plasmid Information

URL: <http://www.addgene.org/59409>

Proper Citation: RRID:Addgene_59409

Insert Name: Nrxn1beta AS4(-)

Organism: Mus musculus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:16846852](#)

Vector Backbone Description: Backbone Size:4869; Vector Backbone:pCAG; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: See map & sequence file for insert-releasing enzymes (e.g. NheI / XmaI). The Nrxn 1 beta variant encoded by this plasmid is AS4(-) / AS5(-): - Exon 21 constituting alternatively spliced segment 4 (AS4) (=ENSMUSE00001309616) is absent. - AS5 is absent, i.e. the short form of exon 23 (23.2) is present (=ENSMUSE00001290978; "GTGGGTTAG" missing compared to (longer) exon 23.1 (=ENSMUSE00000862714)). See Schreiner et al., Neuron, 2014 for nomenclature of alternatively spliced segments (doi:10.1016/j.neuron.2014.09.011).

Plasmid Name: pCAG-HA-Nrxn1beta AS4(-)

Record Creation Time: 20220422T222342+0000

Record Last Update: 20260725T074918+0000

Ratings and Alerts

No rating or validation information has been found for pCAG-HA-Nrxn1beta AS4(-).

No alerts have been found for pCAG-HA-Nrxn1beta AS4(-).

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 5 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Park SJ, et al. (2025) The neurexin gene family regulates olfactory glomerular formation. Cell reports, 44(8), 116125.

Takano T, et al. (2020) Chemico-genetic discovery of astrocytic control of inhibition in vivo. Nature, 588(7837), 296.

Meng X, et al. (2019) Neurexophilin4 is a selectively expressed ??-neurexin ligand that modulates specific cerebellar synapses and motor functions. eLife, 8.

McDermott JE, et al. (2018) Class 4 Semaphorins and Plexin-B receptors regulate GABAergic and glutamatergic synapse development in the mammalian hippocampus. Molecular and cellular neurosciences, 92, 50.

Imai F, et al. (2016) Synapse Formation in Monosynaptic Sensory-Motor Connections Is Regulated by Presynaptic Rho GTPase Cdc42. The Journal of neuroscience : the official journal of the Society for Neuroscience, 36(21), 5724.