

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 10, 2026

GRM1-Tango

RRID:Addgene_66387

Type: Plasmid

Proper Citation

RRID:Addgene_66387

Plasmid Information

URL: <http://www.addgene.org/66387>

Proper Citation: RRID:Addgene_66387

Insert Name: GRM1

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:25895059](#)

Vector Backbone Description: Backbone Size:6632; Vector Backbone:empty Tango; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: Please note: Most of the PRESTO-Tango vectors do not contain the XhoI cut site downstream of the tTA sequence and instead carry an XbaI site. If you need to perform an XhoI digest we recommend sequencing with a forward primer at the C-terminus of tTA to determine which of the two sites is present. Suggested primer: 5-gagctccacttagacggcgagg-3. Original backbone was pcDNA3.1(+). These plasmids were generated as part of the Illuminating the Druggable Genome (IDG) program sponsored by the NIH Common Fund. The goal of this program is to identify, gather, and distribute information and resources for proteins that currently are not well-studied yet belong to commonly drug-targeted protein families: protein kinases, non-olfactory G-protein coupled receptors (GPCRs), and ion channels. The IDG program is designed to develop fundamental research tools for understudied proteins, elucidate their function, and disseminate the IDG-related resources and data to the greater scientific community.

Plasmid Name: GRM1-Tango

Record Creation Time: 20220422T222417+0000

Record Last Update: 20260808T082014+0000

Ratings and Alerts

No rating or validation information has been found for GRM1-Tango.

No alerts have been found for GRM1-Tango.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 7 mentions in open access literature.

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

Malyshev AV, et al. (2024) The novel peptide LCGM-10 attenuates metabotropic glutamate receptor 5 activity and demonstrates behavioral effects in animal models. *Frontiers in behavioral neuroscience*, 18, 1333258.

Ishibashi K, et al. (2024) Astrocyte-induced mGluR1 activates human lung cancer brain metastasis via glutamate-dependent stabilization of EGFR. *Developmental cell*, 59(5), 579.

Huh E, et al. (2023) Coevolutionary signals in metabotropic glutamate receptors capture residue contacts and long-range functional interactions. *The Journal of biological chemistry*, 299(4), 103030.

Surdin T, et al. (2023) Optogenetic activation of mGluR1 signaling in the cerebellum induces synaptic plasticity. *iScience*, 26(1), 105828.

Gao X, et al. (2021) Class A G protein-coupled receptors assemble into functional higher-order hetero-oligomers. *FEBS letters*, 595(14), 1863.

Gao X, et al. (2020) Characterization of heteromeric complexes between chemokine (C-X-C motif) receptor 4 and $\alpha 1$ -adrenergic receptors utilizing intermolecular bioluminescence resonance energy transfer assays. *Biochemical and biophysical research communications*, 528(2), 368.

Watson LM, et al. (2017) Dominant Mutations in GRM1 Cause Spinocerebellar Ataxia Type 44. *American journal of human genetics*, 101(3), 451.