

Resource Summary Report

Generated by [NIF](#) on Sep 14, 2026

pMSP1E3D1

RRID:Addgene_20066

Type: Plasmid

Proper Citation

RRID:Addgene_20066

Plasmid Information

URL: <http://www.addgene.org/20066>

Proper Citation: RRID:Addgene_20066

Insert Name: MSP1E3D1

Organism: synthetic gene

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:17213193](#)

Vector Backbone Description: Backbone Marker:Novagen; Backbone Size:5300; Vector Backbone:pET 28a; Vector Types:Bacterial Expression; Bacterial Resistance:Kanamycin

Plasmid Name: pMSP1E3D1

Relevant Mutation: "extended" MSP1D1; contains repeats of helices 4, 5 and 6;N-terminal 7-his tag followed by spacer sequence and TEV protease cleavage site

Record Creation Time: 20220422T222049+0000

Record Last Update: 20260912T092427+0000

Ratings and Alerts

No rating or validation information has been found for pMSP1E3D1.

No alerts have been found for pMSP1E3D1.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 72 mentions in open access literature.

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

Surya W, et al. (2026) Cardiolipin disperses aquaporin Z tetramers to enhance water permeability. International journal of biological macromolecules, 358, 151540.

Hwang J, et al. (2025) Fc-binding nanodisc restores antiviral efficacy of antibodies with reduced neutralizing effects against evolving SARS-CoV-2 variants. Journal of nanobiotechnology, 23(1), 44.

Šolinc G, et al. (2025) Cryo-EM structures of a protein pore reveal a cluster of cholesterol molecules and diverse roles of membrane lipids. Nature communications, 16(1), 2972.

Hwang J, et al. (2025) Broad-Spectrum Antiviral Styrene Maleic-Acid Copolymer Lipid Particle Nanodiscs for pH-Responsive Irreversible Virus Inactivation. Biomacromolecules, 26(7), 4051.

Merino F, et al. (2025) Cryo-EM structure of a cell-free synthesized full-length human α 1-adrenergic receptor in complex with Gs. Structure (London, England : 1993).

Arranz R, et al. (2025) Elucidating the structure and assembly mechanism of actinoporin pores in complex membrane environments. Science advances, 11(39), eadv0683.

Iyer KA, et al. (2025) Dantrolene inhibition of ryanodine receptor 1 carrying the severe malignant hyperthermia mutation Y522S visualized by cryo-EM. Structure (London, England : 1993), 33(2), 338.

Jemouai Z, et al. (2025) Inner membrane components of the plasmid pKM101 type IV secretion system TraE and TraD are DNA-binding proteins. Scientific reports, 15(1), 7530.

Kozai D, et al. (2025) Narrowed pore conformations of aquaglyceroporins AQP3 and GlpF. Nature communications, 16(1), 2653.

Bruguera ES, et al. (2025) The co-receptor Tetraspanin12 directly captures Norrin to promote ligand-specific β -catenin signaling. eLife, 13.

Carrillo VHP, et al. (2025) Bidirectional communication between nucleotide and substrate binding sites in a type IV multidrug ABC transporter. Nature communications, 16(1), 9921.

Bruguera ES, et al. (2024) The co-receptor Tspan12 directly captures Norrin to promote ligand-specific β -catenin signaling. bioRxiv : the preprint server for biology.

Hariharan P, et al. (2024) Mobile barrier mechanisms for Na⁺-coupled symport in an MFS sugar transporter. eLife, 12.

van den Noort M, et al. (2024) The substrate-binding domains of the osmoregulatory ABC importer OpuA transiently interact. eLife, 12.

Nayak AR, et al. (2024) Interplay between Mg^{2+} and Ca^{2+} at multiple sites of the ryanodine receptor. *Nature communications*, 15(1), 4115.

Bharambe N, et al. (2024) Cryo-EM structures of prokaryotic ligand-gated ion channel GLIC provide insights into gating in a lipid environment. *Nature communications*, 15(1), 2967.

Nakamura T, et al. (2024) Unusual Vibrational Coupling of the Schiff Base in the Retinal Chromophore of Sodium Ion-Pumping Rhodopsins. *The journal of physical chemistry. B*, 128(32), 7813.

Roth P, et al. (2024) Structure and mechanism of a phosphotransferase system glucose transporter. *Nature communications*, 15(1), 7992.

Lee HJ, et al. (2023) Conformational changes in the human Cx43/GJA1 gap junction channel visualized using cryo-EM. *Nature communications*, 14(1), 931.

Surya W, et al. (2023) Anomalous Oligomerization Behavior of *E. coli* Aquaporin Z in Detergent and in Nanodiscs. *International journal of molecular sciences*, 24(9).