

Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

EGFP-hPMCA4b

RRID:Addgene_47589

Type: Plasmid

Proper Citation

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Plasmid Information

URL: <http://www.addgene.org/47589>

Proper Citation: RRID:Addgene_47589

Insert Name: PMCA4x/b

Organism: Homo sapiens

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:12624087](#)

Vector Backbone Description: Backbone Marker:Clontech; Backbone Size:4700; Vector Backbone:pEGFP-C2; Vector Types:Mammalian Expression; Bacterial Resistance:Kanamycin

Comments: HPMCA4x/b coding sequence starts with amino acid 2 (Thr) at pos 1354. This plasmid carries two missense mutations that cause K442R and P663L in the amino acid sequence of hPMCA4b. The depositing lab did not notice any functional consequences in the assays they performed. However, these were mostly concerned with membrane localization and did not include any enzymatic functional studies. Thus, it is not known whether (and how) these two mutations affect the calcium-pumping enzymatic function of the encoded GFP-hPMCA4b protein.

Plasmid Name: EGFP-hPMCA4b

Relevant Mutation: K442R and P673L relative to NP_001675.3

Record Creation Time: 20220422T222245+0000

Record Last Update: 20260815T081542+0000

Ratings and Alerts

No rating or validation information has been found for EGFP-hPMCA4b.

No alerts have been found for EGFP-hPMCA4b.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 1 mentions in open access literature.

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

Allegrini B, et al. (2025) A new regulation mechanism for KCNN4, the Ca²⁺-dependent K⁺ channel, by molecular interactions with the Ca²⁺pump PMCA4b. The Journal of biological chemistry, 301(2), 108114.