

Resource Summary Report

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

pLVX-ATF4 mScarlet NLS

RRID:Addgene_115969

Type: Plasmid

Proper Citation

RRID:Addgene_115969

Plasmid Information

URL: <http://www.addgene.org/115969>

Proper Citation: RRID:Addgene_115969

Insert Name: activating transcription factor 4

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:30088945](#)

Vector Backbone Description: Backbone Marker:Clontech; Backbone Size:8102; Vector Backbone:pLVX-Puro; Vector Types:Mammalian Expression, Lentiviral; Bacterial Resistance:Ampicillin

Comments: This sensor leads to the expression of a mScarlet-I fusion protein in the nucleus upon induction of ER-stress. ER-stress kinetic through the PERK/ATF4 pathway can thus be monitored by recording the red fluorescent signal arising in the nucleus. Designed by Adrien Nougarede.

Plasmid Name: pLVX-ATF4 mScarlet NLS

Record Creation Time: 20220422T221607+0000

Record Last Update: 20260912T091557+0000

Ratings and Alerts

No rating or validation information has been found for pLVX-ATF4 mScarlet NLS.

No alerts have been found for pLVX-ATF4 mScarlet NLS.

Data and Source Information

Usage and Citation Metrics

We found 9 mentions in open access literature.

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

Rochano-Ortiz A, et al. (2025) Excessive glycosylation drives thoracic aortic aneurysm formation through integrated stress response. *European heart journal*.

Zhang T, et al. (2025) POLR1A inhibits ferroptosis by regulating TFAM-mediated mitophagy and iron homeostasis. *Redox biology*, 85, 103758.

Dhaou CB, et al. (2025) Integrin-Specific Signaling Drives ER Stress-Dependent Atherogenic Endothelial Activation. *bioRxiv : the preprint server for biology*.

Ben Dhaou C, et al. (2025) Integrin-specific signaling drives ER stress-dependent atherogenic endothelial activation. *Redox biology*, 88, 103911.

Hirano J, et al. (2024) Enterovirus 3A protein disrupts endoplasmic reticulum homeostasis through interaction with GBF1. *Journal of virology*, 98(7), e0081324.

Wang H, et al. (2023) CRISPR screen identifies the role of RBBP8 in mediating unfolded protein response induced liver damage through regulating protein synthesis. *Cell death & disease*, 14(8), 531.

Fang Z, et al. (2023) Tamoxifen for the treatment of myeloproliferative neoplasms: A Phase II clinical trial and exploratory analysis. *Nature communications*, 14(1), 7725.

Daian LM, et al. (2023) Modulation of Unfolded Protein Response Restores Survival and Function of β -Cells Exposed to the Endocrine Disruptor Bisphenol A. *International journal of molecular sciences*, 24(3).

Li M, et al. (2022) Translational Activation of ATF4 through Mitochondrial Anaplerotic Metabolic Pathways Is Required for DLBCL Growth and Survival. *Blood cancer discovery*, 3(1), 50.