

Resource Summary Report

Generated by [dkNET](#) on Sep 21, 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: 20260919T090607+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

Source: [Addgene](#)

Usage and Citation Metrics

We found 9 mentions in open access literature.

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

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.