

# Resource Summary Report

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

## pFRET-HSP33 cys

RRID:Addgene\_16076

Type: Plasmid

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### Proper Citation

RRID:Addgene\_16076

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### Plasmid Information

**URL:** <http://www.addgene.org/16076>

**Proper Citation:** RRID:Addgene\_16076

**Insert Name:** HSP33 cys

**Organism:** E. coli

**Bacterial Resistance:** Kanamycin

**Defining Citation:** [PMID:16054089](#)

**Vector Backbone Description:** Backbone Marker:Clontech; Backbone Size:5190; Vector Backbone:pECFP-N1; Vector Types:Mammalian Expression; Bacterial Resistance:Kanamycin

**Comments:** The HSP-FRET probe was generated by inserting YFP into the pECFP-N1 plasmid between the NheI and BglII sites and then ligating the redox-sensitive regulatory domain from the Escherichia coli HSP-33 between YFP and CFP via the EcoRI and BamHI sites. HSP-33: 210 amino acids; BA000007 region 4241962-4242826. Made in Hammerling lab; used in Waypa et al., Increases in mitochondrial reactive oxygen species trigger hypoxia-induced calcium responses in pulmonary artery smooth muscle cells, Circ Res. 2006 Oct 27; 99(9):970-8 PMID: 17008601.

**Plasmid Name:** pFRET-HSP33 cys

**Record Creation Time:** 20220422T221909+0000

**Record Last Update:** 20260815T080843+0000

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### Ratings and Alerts

No rating or validation information has been found for pFRET-HSP33 cys.

No alerts have been found for pFRET-HSP33 cys.

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## Data and Source Information

**Source:** [Addgene](#)

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## Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Salsinha AS, et al. (2023) Potential of omega-3 and conjugated fatty acids to control microglia inflammatory imbalance elicited by obesogenic nutrients. *Biochimica et biophysica acta. Molecular and cell biology of lipids*, 1868(7), 159331.

Socodato R, et al. (2023) RhoA balances microglial reactivity and survival during neuroinflammation. *Cell death & disease*, 14(10), 690.

Canedo T, et al. (2021) Astrocyte-derived TNF and glutamate critically modulate microglia activation by methamphetamine. *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*, 46(13), 2358.

Coloma-Rivero RF, et al. (2020) The Role of the Flagellar Protein FlgJ in the Virulence of *Brucella abortus*. *Frontiers in cellular and infection microbiology*, 10, 178.

Socodato R, et al. (2020) Microglia Dysfunction Caused by the Loss of Rhoa Disrupts Neuronal Physiology and Leads to Neurodegeneration. *Cell reports*, 31(12), 107796.

Socodato R, et al. (2015) c-Src deactivation by the polyphenol 3-O-caffeoylquinic acid abrogates reactive oxygen species-mediated glutamate release from microglia and neuronal excitotoxicity. *Free radical biology & medicine*, 79, 45.