

Resource Summary Report

Generated by [RRID](#) on Sep 1, 2026

TS module

RRID:Addgene_26021

Type: Plasmid

Proper Citation

RRID:Addgene_26021

Plasmid Information

URL: <http://www.addgene.org/26021>

Proper Citation: RRID:Addgene_26021

Insert Name: Tension Sensor module

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:20613844](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5428; Vector Backbone:pcDNA3.1; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: There are a few discrepancies with the author sequence. These mismatches are in the pcDNA3.1(+) part of the vector, not the specific inserts. So they should be of little consequence.

Plasmid Name: TS module

Record Creation Time: 20220422T222116+0000

Record Last Update: 20260829T080255+0000

Ratings and Alerts

No rating or validation information has been found for TS module.

No alerts have been found for TS module.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 10 mentions in open access literature.

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

Shoyer TC, et al. (2024) Detection of fluorescent protein mechanical switching in cellulose. *Cell reports methods*, 4(7), 100815.

Hu L, et al. (2024) Comparison of vinculin tension in cellular monolayers and three-dimensional multicellular aggregates. *Biomedical optics express*, 15(9), 5199.

Ayad MA, et al. (2022) Förster resonance energy transfer efficiency of the vinculin tension sensor in cultured primary cortical neuronal growth cones. *Neurophotonics*, 9(2), 025002.

Haas AJ, et al. (2020) Interplay between Extracellular Matrix Stiffness and JAM-A Regulates Mechanical Load on ZO-1 and Tight Junction Assembly. *Cell reports*, 32(3), 107924.

Hayward AN, et al. (2019) A toolkit for studying cell surface shedding of diverse transmembrane receptors. *eLife*, 8.

Dumas JP, et al. (2019) FRET efficiency measurement in a molecular tension probe with a low-cost frequency-domain fluorescence lifetime imaging microscope. *Journal of biomedical optics*, 24(12), 1.

Woroniuk A, et al. (2018) STEF/TIAM2-mediated Rac1 activity at the nuclear envelope regulates the perinuclear actin cap. *Nature communications*, 9(1), 2124.

Arsenovic PT, et al. (2018) Using Nesprin Tension Sensors to Measure Force on the LINC Complex. *Methods in molecular biology* (Clifton, N.J.), 1840, 59.

Arsenovic PT, et al. (2017) A Protocol for Using Förster Resonance Energy Transfer (FRET)-force Biosensors to Measure Mechanical Forces across the Nuclear LINC Complex. *Journal of visualized experiments : JoVE*(122).

Rubashkin MG, et al. (2014) Force engages vinculin and promotes tumor progression by enhancing PI3K activation of phosphatidylinositol (3,4,5)-triphosphate. *Cancer research*, 74(17), 4597.