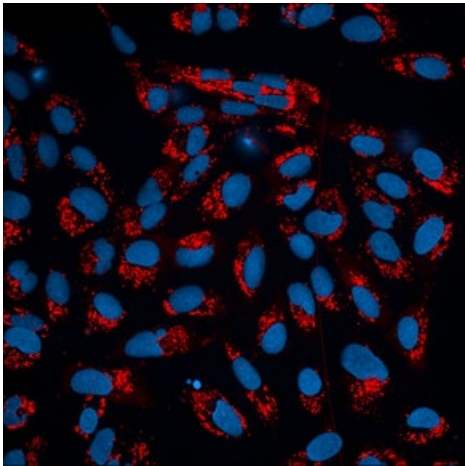


SEQUESTOSOME-1/p62

Single gene-tagged cell line (U-2 OS)

Catalog Number: EXP-019



(NOTE: In above photo, nuclei are counterstained with Hoechst 33342)

Product summary

This single-labeled cell line can be used for identifying autophagic vesicles after stimulation with inducers or inhibitors of autophagy in live cells. This cell line allows detection of the autophagy receptor protein p62 (Sequestosome-1).

Cell Type:	U-2 OS
Gene Symbol:	SQSTM1
NCBI gene ID	8878
Protein:	Sequestosome-1/p62
Subcellular location:	Cytosol/Autophagic vesicles
Modification	N-terminal mRuby3
Excitation/Emission (nm)	558/592
Antibiotic resistance	Zeocin®
Population type	Homozygous

Gene/protein summaries from NCBI database

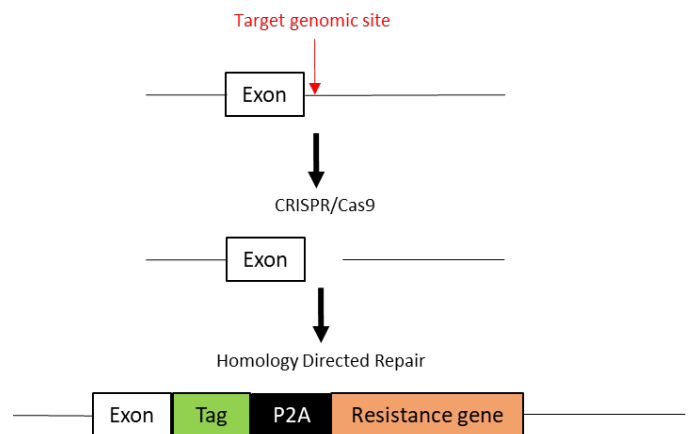
This gene encodes a multifunctional protein that binds ubiquitin and regulates activation of the nuclear factor kappa-B (NF-κB) signaling pathway. The protein functions as a scaffolding/adaptor protein in concert with TNF receptor-associated factor 6 to mediate activation of NF-κB in response

to upstream signals... [provided by RefSeq, Mar 2009]

ExpressCells' FAST-HDR knock-in technology

ExpressCells uses CRISPR and FAST-HDR vector technology to knock-in fluorescent, luminescent, or other tags at the C or N-terminus of endogenous genes. The non-viral FAST-HDR system enables rapid labeling of up to three proteins of interest in a single mammalian cell line.

Schematic Example



Handling

Culture medium: Dulbecco's Modified Eagle Medium (DMEM)-F12 with high glucose supplemented with 10% fetal bovine serum (FBS), penicillin/streptomycin and 2mM glutamine.

Thawing: Transfer the frozen tube to a 37° C water bath and let the contents thaw. Transfer tube contents to 10 mL of prewarmed medium in a biosafety hood and centrifuge at 200 × g for 5 min. Resuspend the pellet in 5 mL of medium and transfer to a mammalian cell culture T25 flask. **Safety:** Biosafety level 2.

References

1. Gene [database online]. Washington DC: NCBI; 2020. <https://www.ncbi.nlm.nih.gov/gene/81631>. Accessed March 18, 2020.
2. Perez-Leal O, Nixon-Abell J, Barrero CA, Gordon J, Rico MC. A versatile vector system for the fast generation of knock-in cell lines with CRISPR [preprint published online February 6, 2020]. *bioRxiv*. doi: 10.1101/2020.02.06.927384.

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