

Guide-it™ CRISPR/Cas9 Gesicle Packaging Set

Catalog No.
632616

Amount
10 rxns

Lot Number
Specified on product label.

Description

Gesicles are cell-derived nanovesicles used to deliver macromolecular cargoes to a broad range of target cells, including cells that are difficult to transfect with plasmids. The nanovesicles generated using the Guide-it CRISPR/Cas9 Gesicle Packaging Set are produced in a Gesicle Producer 293T Cell Line (Cat. No. 632617) via co-overexpression of packaging mix components, which include a nanovesicle-inducing glycoprotein and a protein that is displayed on the cell surface and mediates binding and fusion with the cellular membrane of target cells. Simultaneous overexpression of additional macromolecular cargoes, in this case the Cas9 protein from *Streptococcus pyogenes* and a target-specific guide RNA (sgRNA), results in incorporation of the Cas9/sgRNA complex within the gesicles. After the resulting Cas9/sgRNA gesicles are harvested and applied to your target cells in the presence of protamine sulfate, they will efficiently enter the cells and mediate gene editing. The Guide-it CRISPR/Cas9 Gesicles Packaging Mixes 1 and 2 are each supplied pre-aliquoted and lyophilized in single vials containing Xfect™ Transfection Reagent and an optimized combination of gesicle-producing components. Gesicles are produced by sequentially reconstituting the lyophilized mixtures with your guide RNA vector of choice in sterile water and transfecting the sample into Gesicle Producer 293T cells according to the protocol in the Guide-it CRISPR/Cas9 Gesicle Production System User Manual. It is essential to use the pGuide-it-sgRNA1 Vector for expression/packageing of your guide RNA, since using other commonly used guide RNA vectors will not result in effective Cas9/sgRNA complexes.

Package Contents

- 10 vials Guide-it CRISPR/Cas9 Gesicle Packaging Mix 1, in a foil pouch
- 10 vials Guide-it CRISPR/Cas9 Gesicle Packaging Mix 2, in a foil pouch
- 50 µl A/C Heterodimerizer (0.5 mM)
- 200 µl Protamine Sulfate (4 mg/ml)

Storage Conditions

- Store all components at –20°C.
- Make sure to return any unused vials of Guide-it CRISPR/Cas9 Gesicle Packaging Mix 1 and Guide-it CRISPR/Cas9 Gesicle Packaging Mix 2 to the supplied foil pouches containing the desiccant sachet and store at –20°C.

Shelf Life

- 1 year from date of receipt under proper storage conditions.

Shipping Conditions

- Dry ice (–70°C)

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Product Documents

Documents for our products are available for download at takarabio.com/manuals

The following documents apply to this product:

- Guide-it CRISPR/Cas9 Gesicle Production System User Manual

Quality Control Data

Guide-it CRISPR/Cas9 Gesicles preloaded with a sgRNA against AcGFP1 were produced and added to target cells (HT1080 containing one integrated copy of AcGFP1) as described in the Guide-it CRISPR/Cas9 Gesicle Production System User Manual. The level of AcGFP1 gene knockout was assessed by flow cytometry six days after gesicle addition and shown to be >50% after adding 30 μ l of Cas9/sgRNA gesicles.

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department.

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