# **Human GZMA ORF mammalian expression** plasmid, C-OFPSpark / RFP tag



**Catalog Number: HG13325-ACR** 

**General Information** 

Gene: granzyme A (granzyme 1, cytotoxic T-

lymphocyte-associated serine esterase 3)

Official Symbol: **GZMA** 

Synonym: HFSP, CTLA3, GZMA

Source: Human

cDNA Size: 789bp

RefSeq: BC015739

**Description** 

Lot: Please refer to the label on the tube

Vector: pCMV3-C-OFPSpark

Shipping carrier:

Each tube contains approximately 10 µg of lyophilized plasmid.

Storage:

The lyophilized plasmid can be stored at ambient temperature for three months.

**Quality control:** 

The plasmid is confirmed by full-length sequencing with primers in the sequencing primer list.

Sequencing primer list:

pCMV3-F: 5' CAGGTGTCCACTCCCAGGTCCAAG 3'

pcDNA3-R: 5' GGCAACTAGAAGGCACAGTCGAGG 3'

Or

Forward T7: 5' TAATACGACTCACTATAGGG 3'

ReverseBGH: 5' TAGAAGGCACAGTCGAGG 3'

pCMV3-F and pcDNA3-R are designed by Sino Biological Inc. Customers can order the primer pair from any oligonucleotide supplier.

### **Plasmid Resuspension protocol**

- Centrifuge at  $5,000 \times g$  for 5 min.
- Carefully open the tube and add 100 µl of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- Briefly vortex the tube and then do a quick spin to concentrate the liquid at the bottom. Speed is less than 5000×g.
- 5. Store the plasmid at -20 °C.

#### The plasmid is ready for:

- Restriction enzyme digestion
- PCR amplification
- · E. coli transformation
- DNA sequencing

## E.coli strains for transformation (recommended but not limited)

Most commercially available competent cells are appropriate for the plasmid, e.g. TOP10, DH5α and TOP10F'.

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### **Vector Information**

All of the pCMV vectors are designed for high-level stable and transient expression in mammalian hosts. High-level stable and non-replicative transient expression can be carried out in most mammalian cells. The vectors contain the following elements:

•Human enhanced cytomegalovirus immediate-early (CMV) promoter for high-level expression in a wide range of mammalian cells.

· Hygromycin resistance gene for selection of mammalian cell lines.

 A Kozak consensus sequence to enhance mammalian expression.

Vector Name pCMV3-C-OFPSpark

Vector Size 6806bp

Vector Type Mammalian Expression Vector

Expression Method Constiutive ,Stable / Transient

CMV Promoter

Antibiotic Resistance Kanamycin

Selection In

Hygromycin Mammalian Cells

Protein Tag **OFPSpark** 

Sequencing Primer Forward:T7(TAATACGACTCACTATAGGG)

Reverse:BGH(TAGAAGGCACAGTCGAGG)