Data sheet

Chemokine (C-X-C motif) Receptor 7 Mammalian Transfection Kit

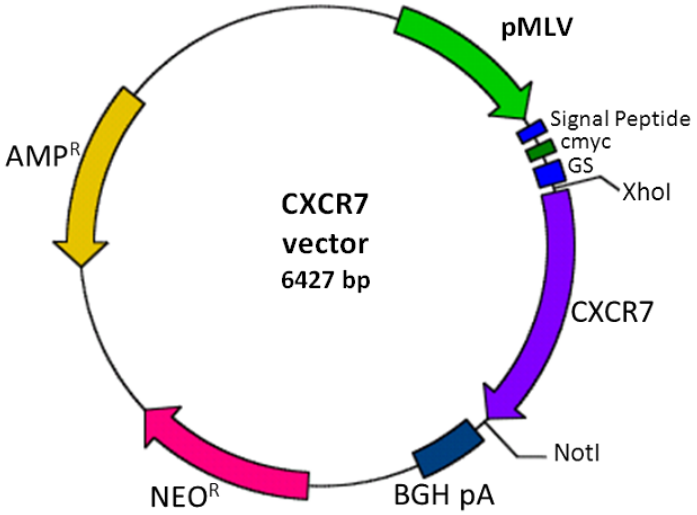
Cat. No: G0541
Cat. No: G0541 Plus

Description

CXCR7 is also known CMKOR1, CXC-R7, CXCR-7, GPR159, RDC1, and in humans is encoded by the CXCR7 gene. It is a member of the G-protein coupled receptor family and was considered as an orphan receptor, its endogenous ligand had not been identified. This receptor is classified as a chemokine receptor able to bind the chemokines CXCL12/SDF-1 and CXCL11. Ligand binding to CXCR7 activates MAP kinases through Beta-arrestins, and thus has functions primarily by sequestering the chemokine CXCL12. This protein is also a coreceptor for human immunodeficiency viruses (HIV).

Kit Components

Components	G0541	G0541 Plus
CXCR7 Mammalian Expression Vector (1 µg/ µL)	15 µL	15 µL
CANFAST Transfection Reagent (1 mg/ mL)	-	1 mL



Unique restriction sites are shown

Promoter	pMLV
ORF Sequence (GenBank based)	NM_020311.2
Protein Sequence (SwissProt)	P25106
Bacterial Selection Antibiotics	Ampicillin
Mammalian Selection Antibiotic	Neomycin

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Assay procedure

Transfection Protocol (stable or transient)

1. **For adherent cells, seed the cells** 18-24 hours before transfection to obtain 60-80% confluence the day of transfection, according the next table.

   For suspension cells, seed the cells the day of transfection. Seed the cells to obtain 60-80% confluence according to the table below. The number of cells to seed depends on cell growth.

Recommended Number of Cells to seed for CANFAST Transfection			
Tissue Culture Vessel	**Growth Area (mm^2)**	**Cell number/ well**	**Final volume/ well (mL)**
Adherent Cells to Seed			
24 well plate	200	$6{,}0\cdot10^4$-$2{,}0\cdot10^5$	0,5
6 well plate	962	2,5-$8{,}0\cdot10^5$	2
Suspension Cells to Seed			
24 well plate	200	$2{,}0\cdot10^4$-$1{,}0\cdot10^5$	0,5
6 well plate	962	1,0-$5{,}0\cdot10^5$	2

   On the day of transfection, it is not necessary to change the medium

2. On the day of transfection, **prepare CANFAST and DNA solution**. Please use medium without serum to prepare them according to the table below.
3. Prepare the transfection mix adding **CANFAST** solution **drop to drop** into DNA solution which is gently stirring at vortex.

Recommended Ratios CANFAST Transfection Reagent / DNA					
Tissue Culture Vessel	**DNA Solution**		**CANFAST solution**		**Transfection Mix (mL)****
	DNA (µg)	**Medium without serum (µL)***	**CANFAST Reagent (µL)**	**Medium without serum (µL)***	
96 well plate	0,15	7,5	0,4-1	7,5	15
48 well plate	0,3	15	1-1,8	15	30
24 well plate	0,6	30	2-4	30	60
12 well plate	1	50	2-6	50	100
6 well plate	1-2	100	6-12	100	200
35 mm plate	1-2	100	6-12	100	200
60 mm plate	3-6	300	18-36	300	600
100 mm plate	8-16	800	48-96	800	1600

* *Final volume after DNA or CANFAST Reagent addition*
** *Transfection mix is the addition of volumes from 3rd and 5th columns.*

4. Incubate transfection mix 15-20 minutes at room temperature.
5. **For transfection**, add transfection mix into each well by leaking. Gentle shake the plate and incubate it 24 – 72 hours. Some cell lines are more sensitive and require change the culture medium 1 – 16 hours after adding the transfection mixture to avoid toxicity.

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