

Enhanced blue fluorescent protein(EBFP) In Vitro Transcribed mRNA-LNP

Catalog Number:MRNA-TG-014

DESCRIPTION	
Product Name	Enhanced blue fluorescent protein(EBFP) In Vitro Transcribed mRNA-LNP
Gene Name	Enhanced blue fluorescent protein(EBFP)
Source	In vitro transcribed mRNA encapsulated with LNP
Alternative names	
SPECIFICATIONS	
Cap	Cap 1
5'-UTR	5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence
ORF	Enhanced blue fluorescent protein(EBFP)
3'-UTR	3' UTR comprising two sequence elements derived from the aminoterminal enhancer of split (AES) mRNA and the mitochondrial encoded 12S ribosomal RNA
Poly(A) Tail	A 110-nucleotide poly(A)-tail consisting of a stretch of 30 adenosine residues, followed by a 10-nucleotide linker sequence and another 70 adenosine residues.
Modifications	N1-methyl-pseudouridine
Neutral Lipid	1,2-distearoyl-sn-glycero-3-phosphocholine (DSPC)
Cholesterol	Cholesterol
Ionizable Lipid	1,2-dimyristoyl-rac-glycero-3-methoxypolyethylene glycol-2000 (PEG2000-DMG)
PEG-lipid	Heptadecan-9-yl 8-((2-hydroxyethyl)(8-(nonyloxy)-8-oxooctyl)amino)octanoate)(SM-102)
Storage	-20 °C
Buffer	PBS, pH7.4
Cryoprotectant	Trehalose
BACKGROUND	
Gene Accession	
Gene Alias	

gene (UniProtKB:P42212), containing the mutations F64L, S65T, Y66H and Y145F (PMID:9525926). EBFP has low brightness and very poor photostability (PMID:20664080).

Background

EBFP is a basic (constitutively fluorescent) blue fluorescent protein published in 1998, derived from *Aequorea victoria*. EBFP is a blue fluorescent protein with an excitation peak of 380nm and an emission peak of 440nm in vitro. It is an artificial derivative of the naturally occurring fluorescent protein encoded by the *Aequorea victoria* GFP