

OVA mRNA

(mRNA encoding Ovalbumin protein)

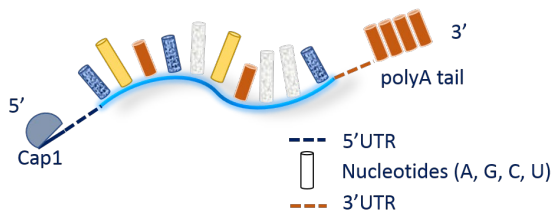
Description

Ready-to-use stabilized OVA mRNAs.
Concentration: 1.0 mg/mL in 1 mM Sodium Citrate, pH 6.4.
mRNA length: 1375 nt. MW **MRNA42**= 445528 g/mol; **MRNA41**= 451168 g/mol; **MRNA40**=448348 g/mol.

OVA mRNAs have been designed to produce high expression level of Ovalbumin protein. OZB mRNAs are produced by *in vitro* transcription. mRNAs are stabilized at the 5' end by modified nucleotides capping (Cap1) and contain a poly(A) tail at the 3' end. Sequences have been optimized to yield improved stability and performance. OVA mRNA **#MRNA42** does not bear any additional nucleotide modifications while **#MRNA41** is modified with 5-methoxyuridine (5moU), **#MRNA40** is modified with N1-methyl-pseudouridine (n1-mψ) to reduce innate immune response.

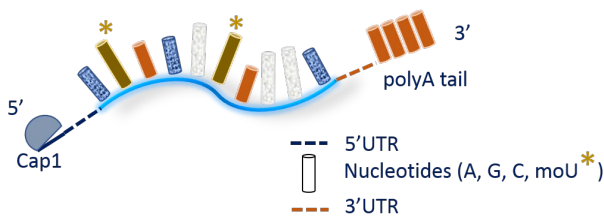
(ref# **MRNA42**):

Mature mRNA (unmodified nucleotides) with cap1 and polyA tail



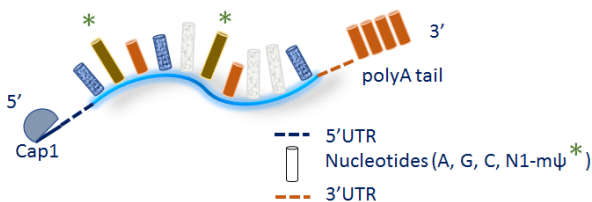
(ref# **MRNA41**):

Mature mRNA (fully modified moU) with cap1 and polyA tail



(ref# **MRNA40**):

Mature mRNA (fully modified N1-mψ) with cap1 and polyA tail



Applications

This mRNA encodes for the Ovalbumin protein that is a commonly used antigen for immunization and biochemical studies and also an established model allergen for airway hyper-responsiveness.

OVA mRNAs resemble fully matured mRNAs with 5' cap1 structure and 3' polyA tail, therefore ready to be translated by the ribosome. mRNA transfection provides several advantages over plasmid DNA (pDNA) delivery. It does not require nuclear uptake for being expressed since translation of mRNA occurs directly into cytoplasm. Indeed, nuclear delivery (transport through nuclear membrane) is one of the principal barriers for transfecting slow or non-dividing cells and consequently, mRNA transfection is particularly attractive for such purpose. This approach presents also the advantage of being non-integrative which is particularly appealing for stem cells, regenerative medicine or vaccine fields. Contrary to pDNA, mRNA cannot lead to genetic insertion causing mutations. Moreover, the protein expression from the mRNA is promoter-independent and faster than with DNA. For transfection we recommend RmesFect™ (#RM21000) and RmesFect™ Stem (#RS31000).

Kit contents

OVA mRNAs -20: 20 µg of mRNA unmodified or modified.
OVA mRNAs -100: 100 µg of mRNA unmodified or modified.
OVA mRNAs -1000: 1 mg of mRNA unmodified or modified.

Storage

OVA mRNAs must be stored at -80°C. We recommend to aliquot the mRNA solution for a better storage.

OZ Biosciences SAS

163 avenue de Luminy
Case 922, zone entreprise
13288 Marseille cedex 09 - FRANCE
Ph: +33 (0) 486 948 516
Fax: +33 (0) 486 948 515
contact@ozbiosciences.com
order@ozbiosciences.com

OZ Biosciences USA Inc.

7975 Dunbrook Road, Suite B,
San Diego,
CA 92126-USA
Ph : + 1-858-246-7840
Fax : + 1-855-631-0626
contactUSA@ozbiosciences.com
orderUSA@ozbiosciences.com

Related Products

Ref	Description
RM21000	RmesFect™ transfection reagent 1mL
RS31000	RmesFect™ Stem transfection reagent 1mL
MRNA34/35	mRNA Spike SARS-CoV-2 (E484K; N501Y)
MRNA36/37	mRNA Spike SARS-CoV-2 DELTA mutant

Discover the complete list of mRNA at: www.ozbiosciences.com

Custom mRNAs are also available now!

Contact Us

Feel free to contact us for all complementary information and remember to visit our website to stay informed on the latest breakthrough technologies and updated on our complete product list. (www.ozbiosciences.com). For bulk, please contact us: order@ozbiosciences.com

Technical questions: tech@ozbiosciences.com
Order: order@ozbiosciences.com
General Information: contact@ozbiosciences.com

OZ Biosciences SAS

163 avenue de Luminy
Case 922, zone entreprise
13288 Marseille cedex 09 - FRANCE
Ph: +33 (0) 486 948 516
Fax: +33 (0) 486 948 515
contact@ozbiosciences.com
order@ozbiosciences.com

OZ Biosciences USA Inc.

7975 Dunbrook Road, Suite B,
San Diego,
CA 92126-USA
Ph : + 1-858-246-7840
Fax : + 1-855-631-0626
contactUSA@ozbiosciences.com
orderUSA@ozbiosciences.com