Product Datasheet

Anti-c-Met CAR mRNA-LNP (orb2719953)

Catalog Number	orb2719953
Category	Antibodies
Description	c-Met (Mesenchymal transforming factor), also known as hepatocyte growth factor receptor (HGFR), is encoded by the MET gene. The encoded preproprotein is proteolytically processed to generate Î± and Î² subunits linked by disulfide bonds to form the mature receptor. This tyrosine kinase receptor is activated by binding to its ligand, the spliced isoform of hepatocyte growth factor/scatter factor (HGF/SF) (NK1, NK20), critical for cell survival, embryogenesis, cell migration and invasion. Aberrant MET activation in cancer correlates with poor prognosis, and abnormally active MET triggers tumor growth, tumor-feeding angiogenesis, and cancer metastasis. MET is dysregulated in many types of human malignancies, including renal, liver and gastric cancers. Mutations in this gene have been reported to be associated with papillary renal cell carcinoma, hepatocellular carcinoma, and various head and neck cancers, and amplification and overexpression have also been associated with various human cancers. This product is designed as a tool for the delivery and expression of anti-c-Met CAR mRNA for research. The product leverages the lipid nanoparticle (LNP) technology platform for simple and efficient delivery of anti-c-Met CAR mRNA to a variety of mammalian cells in vitro and in vivo. The LNPs used are formulated with SM-102, DSPC, cholesterol and DMG-PEG2000 at an optimal molar concentration for a high rate of encapsulation and efficient mRNA delivery. The anti-c-Met CAR in this product is approximately 56 kD and consists of anti-c-Met scFv (single-chain variable fragment) linked to a second-generation CAR (chimeric antigen receptor) containing the CD8 hinge and transmembrane domain and 4-1BB and CD3Î¶ signaling domains. The full-length amino acid sequence of this anti-c-Met CAR mRNA-LNP product is available upon request.
Conjugation	Unconjugated
Form/Appearance	mRNA-LNPs suspended in PBS (-Ca, -Mg) (pH: 7.0-7.4).

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Application notes	Upon receiving product, briefly pulse spin before opening to ensure product is at bottom of container. It is important not to spin for too long as this may rupture mRNA-LNPs. Do not vortex. Work with mRNA-LNPs on ice and minimize the time that the product spends at room temperature. After handling the product during experiments, return immediately to ice. mRNA-LNP products should only be handled with certified RNase-free reagents and consumables. Use of filtered pipette tips is highly recommended.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Note	For research use only

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