

Product Datasheet

Anti-Her-2/CD3 bispecific mRNA-LNP (orb2719936)

Catalog	Number	orb2719936
catalog	Mannoci	0102715550

Description HER2 (human epidermal growth factor receptor 2) is a member of the human epidermal growth factor receptor (ERBB) family and is encoded by the human ERBB2 gene. In contrast to other members of the ERBB family, HER2 does not directly bind ligands. HER2 is overexpressed in a range of tumors, including breast, gastric, lung and ovarian cancers. It can be activated by heterodimerization with another ERBB member or by homodimerization when HER2 concentrations are high, such as in cancer. Overexpression of this oncogene has been shown to be associated with the development and progression of certain aggressive types of breast cancer. Therefore, HER2 is an important target for cancer therapy. This product is designed as a tool for the delivery and expression of anti-Her-2 scfv/CD3-mut Fc mRNA for research. The product leverages the lipid nanoparticle (LNP) technology platform for simple and efficient delivery of anti-Her-2 scfv/CD3-mut Fc 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 Her-2 scfv/CD3-mut Fc fusion protein is approximately 80 kD and consists of anti-HER2 scFv (singlechain variable fragment), CD31¶ signaling domain and mutant human Fc. The full-length amino acid sequence of this anti-Her-2 scfv/CD3-mut Fc fusion protein is available upon request.

Conjugation Unconjugated

Form/Appearance mRNA-LNPs suspended in PBS (-Ca, -Mg) (pH: 7.0-7.4).

StorageMaintain 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

Biorbyt Ltd.

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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.

Expiration Date 12 months from date of receipt.

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