SARS-CoV-2 Furin Cleavage Site

Contents

1. Description
   - 1.1 Background information
   - 1.2 Applications

1. Description

Products SARS-CoV-2 Furin Cleavage Site-Biotin or SARS-CoV-2 Furin Cleavage Site FAM-Biotin.

Productname	Content	Order no.
SARS-CoV-2 Furin Cleavage Site-Biotin	100 µg	130-127-689
SARS-CoV-2 Furin Cleavage Site FAM-Biotin	100 µg	130-127-690

Primary structure SARS-CoV-2 Furin Cleavage Site-Biotin: Biotinylated synthetic peptide (21 amino acid residues), TFA salt.

SARS-CoV-2 Furin Cleavage Site FAM-Biotin: Biotinylated synthetic peptide (22 amino acid residues), N-terminal FAM labeled, TFA salt.

Molecular mass SARS-CoV-2 Furin Cleavage Site-Biotin: 2.59 kDa .
SARS-CoV-2 Furin Cleavage Site FAM-Biotin 3.08 kDa.

Source Fully synthetic peptide.

Product format Lyophilized peptide containing stabilizer.

Stabilizer Mannitol.

Purity >85% as determined by HPLC analysis.

Endotoxin level Low endotoxin (<0.1 EU/µg protein) as determined by Limulus Amebocyte Lysate (LAL) assay.

Storage Lyophilized SARS-CoV-2 Furin Cleavage Site should be stored at –20 °C. The expiration date is indicated on the vial label. Upon reconstitution aliquots should be stored at –20 °C or below. Avoid repeated freeze-thaw cycles.

Reconstitution It is recommended to reconstitute lyophilized SARS-CoV-2 Furin Cleavage Site with deionized, sterile-filtered water to a final concentration of 0.1–1.0 mg/mL in a minimal volume of 100 µL.

1.1 Background information

The ectodomain of the SARS-CoV-2 S glycoprotein encodes the N-terminal S1 subunit, including the receptor binding domain, and, the C-terminal S2 subunit. The junction connecting S1 with S2 contains the furin cleavage site at position R682–R685 (RRAR). Recent structural studies on the SARS-CoV-2 spike protein showed that this part of the protein is solvent-exposed and disordered. The SARS-CoV-2 Furin Cleavage Site peptide covers amino acids S673–S691 of the SARS-CoV-2 spike glycoprotein. The SARS-CoV-2 Furin Cleavage Site-Biotin is specifically biotinylated at the C terminus.
SARS-CoV-2 Furin Cleavage Site FAM-Biotin contains an N-terminal fluorescent FAM label for easy detection.

1.2 Applications

The product can be used for a variety of applications, including:

- Analysis of SARS-CoV-2 immune responses
- Detection and characterization of SARS-CoV-2–specific antibodies
- Studying Furin cleavage kinetics and Furin inhibitor activity

The optimal concentration for a specific application should be determined by a dose-response experiment.

Refer to www.miltenyibiotec.com for all data sheets and protocols. Miltenyi Biotec provides technical support worldwide. Visit www.miltenyibiotec.com/local to find your nearest Miltenyi Biotec contact.

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