

NF70 peptide

Catalogue number: 157646

Sub-type: Synthetic Peptide

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: NF70 peptide

Alternate name: NickFect7

Class:

Conjugate:

Description: This peptide can be used to transport siRNA into cells. Use of cell-penetration peptides can increase the transport efficiency of extracellular synthetic nucleic acids, such as siRNAs, to help increase concentration of the siRNA at the desired cellular location. This peptide is based on NickFect55 (NF55) which is a peptide that can efficiently transport plasmid DNA into cells in vivo. To improve the efficiency of nucleic acid delivery, this peptide has been developed to improve the intracellular release mechanism resulting in higher local dosage of the cargo. The pH sensitivity of the peptide allows for association to siRNA cargo, transport into cells, and dissociation of the siRNA in the appropriate cellular compartment (lysosomal or endosomal compartments).

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence: HHHHYHHGO(ILLKALKALAKAIL)

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: There is an arachidyl (20-carbon) fatty acid chain attached to the N-terminus of the peptide. The sequence in brackets is attached to the sidechain amino group rather than the α -amino group. NF70 is a pH-activated, histidine-rich cell-penetrating peptide with low cell toxicity. It also has low membrane activity at physiological pH and forms stable nanoparticles in combination with siRNAs. This has been used to successfully knockdown genes *in vivo* and *in vitro*.

Target details

Target: Other

Target alternate names:

Target background:

Molecular weight:

IC₅₀:

Applications

Application:

Application notes: There is an arachidyl (20-carbon) fatty acid chain attached to the N-terminus of the peptide. The sequence in brackets is attached to the sidechain amino group rather than the α -amino group. NF70 is a pH-activated, histidine-rich cell-penetrating peptide with low cell toxicity. It also has low membrane activity at physiological pH and forms stable nanoparticles in combination with siRNAs. This has been used to successfully knockdown genes *in vivo* and *in vitro*.

Handling

Format:

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions:

Dry Ice

Related tools

Related tools:

References

References:

CancerTools.org