



Human MSP1D1 dH5 lyophilized protein with a his-tag

Catalog: MSP-1002

Recombinant human membrane scaffold protein 1 D1 delta H5 mutant was expressed in E.coli and purified by Ni-NTA.

PRODUCT INFORMATION

Product Name	Human MSP1D1 dH5 lyophilized protein with a his-tag
Catalog Number	MSP-1002
Source	E.coli
Product Overview	Recombinant human membrane scaffold protein 1 D1 delta H5 mutant was expressed in E.coli and purified by Ni-NTA.
Purity	>90%
Species	Human
Tag	His
Molecular Mass	21.68kDa
Storage	Stored lyophilized powder at -20°C. The reconstituted solution should be stored at 2-8°C and should be used up in several days.
Background	Nanodiscs are a new class of model membranes that are being used to solubilize and study a range of integral membrane proteins and membrane-associated proteins. The Nanodisc bilayer is bounded by a membrane scaffold protein coat that confers enhanced stability and a narrow particle size distribution. The nanodisc assembles from a mixture of full length membrane protein in detergent, phospholipid micelles and membrane scaffold protein upon removal of the detergent.



Reconstitution	Adding double distilled water to prepare a stock solution of 4mg/mL. This stock solution can be diluted further as required by the different application protocols.
Scaffold Diameter	7-8 nm
Formulation	Lyophilized from 20mM Tris pH 7.4, 100 mM NaCl, 0.5 mM EDTA.

USAGE GUIDELINES

General Handling	Avoid excessive mixing or vortexing to prevent aggregation. Long-term storage above -80°C may result in aggregate formation. Thaw on ice before use.
Storage	Short term: +2°C to +8°C (up to 1 week) Long term: -80°C (stable for 12 months)
Stability	Stable for 12 months at -80°C. Avoid repeated freeze-thaw cycles.
Freeze / Thaw	Can be frozen, but limit to 3 freeze/thaw cycles to maintain particle integrity.

Important: This product is for **research use only**. Not intended for diagnostic or therapeutic applications. Please refer to the Safety Data Sheet (SDS) for complete handling and safety information.