

MSP1D1 “Dark”, human

Cat. No.: 26332 (2 mg)

Description	MSP1D1 “Dark” is a membrane scaffold protein (MSP) derived from apolipoprotein A-I that wraps around a phospholipid bilayer patch to form stable, water-soluble nanodiscs, enabling detergent-free solubilization and stabilization of membrane proteins in a near-native lipid environment. Its defining feature is the replacement of all tryptophan residues with phenylalanine, resulting in a significantly reduced absorption signal at 280 nm.
Form	Lyophilized
Amount	2 mg
Available origins	Human
Purity	> 90% (Determined by SDS-PAGE)
Number of amino acids	201
Molecular mass	23.2 kDa
Extinction coefficient (in H₂O) ϵ_{280}	Ext. coefficient 7450 Abs 0.1% (=1 g/l) 0.321
Buffer	20 mM TRIS pH 7.4, 100 mM NaCl, 0.5 mM EDTA
Affinity tag	No tag
Sequence	G LKLLDNFDSVTSTFSKLREQL GPVTQEFFDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKFQEEMELYRQKVE PLRAELQEGARQKLHELQEKLSPLGEEMRDRARAHVDALRTHLA PYSDELQRQLAARLEALKENG ARLAEYHAKATEHLSTLSEKAKPALEDLRQGLL PVLESFKVSFLSALEEYTKKLNTQ
Stability & Storage	Lyophilized protein: stable at -20°C for several months. Reconstituted protein: stable at 2-8°C for several days.
Shipping	Room temperature
Hazards	Product is not classified as hazardous according to (EC) No 1272/2008 [CLP]. A Material Safety Data Sheet is provided.

Application	MSP1D1 "Dark" enables reliable UV-Vis based concentration determination and reduces background interference in fluorescence-based assays and label-free detection methods, offering a clear advantage over standard MSPs and alternative solubilization agents such as AASTY or SMA. It is further suited for Cryo-EM, ELISA, protein-protein interaction studies, and cell-free expression systems, supporting a broad range of biomedical, proteomic, and protein biochemistry applications.
Recommended usage	
Manufacturer	Cube Biotech

Commented [AN1]: Ich würde den Teil etwas kürzer und neutraler halten und einfach die mögliche Applikationen nennen. Die ausführliche Beschreibung kann man dann auf der Produktseite in die Produktbeschreibung mit einbauen

For research use only

Trademark information

The owners of trademarks marked by "®" or "TM" are identified at <http://www.cube-biotech.com/information/patents>. Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

Important licensing information

This product is covered by intellectual property (IP) rights and on completion of the sale Cube Biotech grants respective Limited Use Label Licenses to purchaser. IP rights and Limited Use Label Licenses for said technology are further described and identified at <http://www.cube-biotech.com/information/patents> or upon inquiry at info@cube-biotech.com or at Cube Biotech GmbH, Creative-Campus-Allee 12, D-40789 Monheim, Germany. By use of this product the purchaser accepts the terms and conditions of all applicable Limited Use Label Licenses.