

**PRODUCT INFORMATION**

<b>Target</b>	DSU
<b>Synonyms</b>	DSU; WDT2
<b>Description</b>	Recombinant protein of human melanoregulin (MREG)
<b>Delivery</b>	2-3 weeks
<b>Uniprot ID</b>	Q8N565
<b>Expression Host</b>	HEK293T
<b>Tag</b>	C-Myc/DDK
<b>Molecular Characterization</b>	N/A
<b>Molecular Weight</b>	24.7 kDa
<b>Purity</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Formulation &amp; Reconstitution</b>	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol
<b>Storage &amp; Shipping</b>	Store at -80°C.
<b>Background</b>	Probably functions as cargo-recognition protein that couples cytoplasmic vesicles to the transport machinery. Plays a role in hair pigmentation, a process that involves shedding of melanosome-containing vesicles from melanocytes, followed by phagocytosis of the melanosome-containing vesicles by keratinocytes. Functions on melanosomes as receptor for RILP and the complex formed by RILP and DCTN1, and thereby contributes to retrograde melanosome transport from the cell periphery to the center. Overexpression causes accumulation of late endosomes and/or lysosomes at the microtubule organising center (MTOC) at the center of the cell. Probably binds cholesterol and requires the presence of cholesterol in membranes to function in microtubule-mediated retrograde organelle transport. Binds phosphatidylinositol 3-phosphate, phosphatidylinositol 4-phosphate, phosphatidylinositol 5-phosphate and phosphatidylinositol 3,5-bisphosphate, but not phosphatidylinositol 3,4-bisphosphate or phosphatidylinositol 4,5-bisphosphate (By similarity). Required for normal phagosome clearing and normal activation of lysosomal enzymes in lysosomes from retinal pigment epithelium cells (PubMed:19240024). Required for normal degradation of the lipofuscin component N-retinylidene-N-retinylethanolamine (A2E) in the eye. May function in membrane fusion and regulate the biogenesis of disk membranes of photoreceptor rod cells (By similarity).[UniProtKB/Swiss-Prot Function]
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated

