

Product datasheet for **AR51402PU-S**

Melanoregulin (1-214, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Melanoregulin (1-214, His-tag) human recombinant protein, 50 µg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH</u> <u>SSGLVPRGSH</u> <u>MGSMGLRDWL</u> RTVCCCCGCE CLEERALPEK EPLVSDNNPY SSFGATLVRD DEKNLWSMPH DVSHTEADDD RTLYNLIVIR NQQAQDSEEW QKLNVDIHTL RQVRREVRNR WKCILEDLGF QKEADSLLSV TKLSTISDSK NTRKAREMLL KLAEETNIFP TSWELSERYL FVVDRLIALD AAEFFKLAR RTYPKPGVP CLADGQKELH YLPFPSP
Tag:	His-tag
Predicted MW:	27.3 kDa
Concentration:	lot specific
Purity:	>90% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1 mM DTT
Preparation:	Liquid purified protein
Protein Description:	Recombinant human MREG protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_060470</u>
Locus ID:	55686
UniProt ID:	<u>Q8N565</u>
Cytogenetics:	2q35
Synonyms:	MREG, DSU, HDCGA21P



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Summary:

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]

Product images: