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Product datasheet for PH309590

WASH1 (WASHC1) (NM_182905) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	WASH1 MS Standard C13 and N15-labeled recombinant protein (NP_878908)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC209590
Predicted MW:	50.1 kDa
Protein Sequence:	>RC209590 representing NM_182905 Red=Cloning site Green=Tags(s) MTPVRMQHSLAGQTYAVPFIQPDLRREEAVQQMADALQYLQKVSGDIFSRISQQVEQSRSQVQAIGEKVS LAQAKIEKIKGSKKAIKVFSSAKYPAPGRLQEYGSIFTGAQDPGLQRRPRHRIQSKHRPLDERALQEKLK DFPVCVSTKPEPEDDAEEGLGGLPSNISSVSSLLLFNTTENLYKKYVFLDPLAGAVTKTHVMLGAETEEK LFDAPLSISKREQLEQQVPENYFYVPDLGQVPEIHVPSYLPDLPGIANDLMYSADLGPGIAPSAPGTIPE LPTFHTEVAEPLKVDLQDGVLTPPPPPPPPPAPEVLASAPPLPPSTAAPVGQGARQDDSSSSASPSVQG APREVVDPSGGWATLLESIRQAGGIGKAKLRSMKERKLEKQQQKEQEQVRATSQGGHLMSDLFNKLVMRR KGISGKGPGAGEGPGGAFVRVSDSIPPLPPPQQPQAEEDEDDWES TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_878908
RefSeq Size:	1851
RefSeq ORF:	1395
Synonyms:	FAM39E; WASH; WASH1

View online »

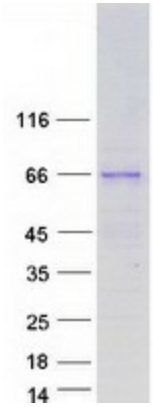
Locus ID: 100287171

UniProt ID: A8K0Z3

Cytogenetics: 9p24.3

Summary: Acts as a nucleation-promoting factor (NPF) at the surface of endosomes, where it recruits and activates the Arp2/3 complex to induce actin polymerization, playing a key role in the fission of tubules that serve as transport intermediates during endosome sorting (PubMed:19922874, PubMed:19922875, PubMed:20498093, PubMed:23452853). Its assembly in the WASH core complex seems to inhibit its NPF activity and via WASHC2 is required for its membrane targeting (PubMed:20498093). Involved in endocytic trafficking of EGF (By similarity). Involved in transferrin receptor recycling. Regulates the trafficking of endosomal alpha5beta1 integrin to the plasma membrane and involved in invasive cell migration (PubMed:22114305). In T-cells involved in endosome-to-membrane recycling of receptors including T-cell receptor (TCR), CD28 and ITGAL; proposed to be implicated in T cell proliferation and effector function. In dendritic cells involved in endosome-to-membrane recycling of major histocompatibility complex (MHC) class II probably involving retromer and subsequently allowing antigen sampling, loading and presentation during T-cell activation (By similarity). Involved in Arp2/3 complex-dependent actin assembly driving Salmonella typhimurium invasion independent of ruffling. Involved in the exocytosis of MMP14 leading to matrix remodeling during invasive migration and implicating late endosome-to-plasma membrane tubular connections and cooperation with the exocyst complex (PubMed:24344185). Involved in negative regulation of autophagy independently from its role in endosomal sorting by inhibiting BECN1 ubiquitination to inactivate PIK3C3/Vps34 activity (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Coomassie blue staining of purified WASHC1 protein (Cat# [TP309590]). The protein was produced from HEK293T cells transfected with WASHC1 cDNA clone (Cat# [RC209590]) using MegaTran 2.0 (Cat# [TT210002]).