

Product datasheet for TP510849

OriGene Technologies, Inc.

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Vil1 (NM_009509) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse villin 1 (Vil1), with C-terminal MYC/DDK tag, expressed in

HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA >MR210849 protein sequence Clone or AA Sequence: Red=Cloning site Green=Tags(s)

MTKLNAQVKGSLNITTPGIQIWRIEAMQMVPVPSSTFGSFFDGDCYVVLAIHKTSSTLSYDIHYWIGQDS
SQDEQGAAAIYTTQMDDYLKGRAVQHREVQGNESETFRSYFKQGLVIRKGGVASGMKHVETNSCDVQRLL
HVKGKRNVLAGEVEMSWKSFNRGDVFLLDLGKLIIQWNGPESNRMERLRGMALAKEIRDQERGGRTYVGV
VDGEKEGDSPQLMAIMNHVLGPRKELKAAISDSVVEPAAKAALKLYHVSDSEGKLVVREVATRPLTQDLL
KHEDCYILDQGGLKIFVWKGKNANAQERSGAMSQALNFIKAKQYPPSTQVEVQNDGAESPIFQQLFQKWT
VPNRTSGLGKTHTVGSVAKVEQVKFDALTMHVQPQVAAQQKMVDDGSGEVQVWRIEDLELVPVESKWLGH
FYGGDCYLLLYTYLIGEKQHYLLYIWQGSQASQDEIAASAYQAVLLDQKYNDEPVQIRVTMGKEPPHLMS
IFKGRMVVYQGGTSRKNNLEPVPSTRLFQVRGTNADNTKAFEVTARATSLNSNDVFILKTPSCCYLWCGK
GCSGDEREMAKMVADTISRTEKQVVVEGQEPANFWMALGGKAPYANTKRLQEENQVITPRLFECSNQTGR
FLATEIFDFNQDDLEEEDVFLLDVWDQVFFWIGKHANEEEKKAAATTVQEYLKTHPGNRDLETPIIVVKQ
GHEPPTFTGWFLAWDPFKWSNTKSYDDLKAELGNSGDWSQIADEVMSPKVDVFTANTSLSSGPLPTFPLE

QLVNKSVEDLPEGVDPSRKEEHLSTEDFTRALGMTPAAFSALPRWKQQNIKKEKGLF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 92.8 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.





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Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 033535

Locus ID: 22349

UniProt ID: <u>Q62468</u>, <u>Q8CEJ4</u>

RefSeq Size: 3117

Cytogenetics: 1 38.54 cM

RefSeq ORF: 2484 Synonyms: Vil

Summary: Epithelial cell-specific Ca(2+)-regulated actin-modifying protein that modulates the

reorganization of microvillar actin filaments. Plays a role in the actin nucleation, actin filament

bundle assembly, actin filament capping and severing. Binds phosphatidylinositol 4,5-

bisphosphate (PIP2) and lysophosphatidic acid (LPA); binds LPA with higher affinity than PIP2. Binding to LPA increases its phosphorylation by SRC and inhibits all actin-modifying activities. Binding to PIP2 inhibits actin-capping and -severing activities but enhances actin-bundling activity. Regulates the intestinal epithelial cell morphology, cell invasion, cell migration and apoptosis. Protects against apoptosis induced by dextran sodium sulfate (DSS) in the gastrointestinal epithelium. Appears to regulate cell death by maintaining mitochondrial integrity. Enhances hepatocyte growth factor (HGF)-induced epithelial cell motility, chemotaxis

and wound repair. Upon S.flexneri cell infection, its actin-severing activity enhances actin-based

motility of the bacteria and plays a role during the dissemination.[UniProtKB/Swiss-Prot

Function]