

## **Product datasheet for TP502075**

## OriGene Technologies, Inc.

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## Rab13 (NM 026677) Mouse Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Mouse RAB13, member RAS oncogene family (Rab13), with C-

terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

**Species:** Mouse

**Expression Host:** HEK293T

**Expression cDNA Clone** 

or AA Sequence:

>MR202075 protein sequence Red=Cloning site Green=Tags(s)

MAKAYDHLFKLLLIGDSGVGKTCLIIRFAEDNFNSTYISTIGIDFKIRTVDIEGKRIKLQVWDTAGQERF KTITTAYYRGAMGIILVYDITDEKSFENIQNWMKSIKENASAGVERLLLGNKCDMEAKRQVQREQAEKLA

REHRIRFFETSAKSSVNVDEAFSSLARDILLKTGGRRSGTNSKPSSTGLKTSDKKKNKCLLG

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-MYC/DDK

Predicted MW: 22.8 kDa

**Concentration:**  $>0.05 \mu g/\mu L$  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.

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 080953

 Locus ID:
 68328

 UniProt ID:
 Q9DD03

RefSeq Size: 1548

Cytogenetics: 3 39.21 cM







RefSeq ORF: 609

**Synonyms:** 0610007N03Rik; B230212B15Rik

Summary: The small GTPases Rab are key regulators of intracellular membrane trafficking, from the

formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. That Rab is involved in endocytic recycling and regulates the transport to

the plasma membrane of transmembrane proteins like the tight junction protein OCLN/occludin. Thereby, it regulates the assembly and the activity of tight junctions.

Moreover, it may also regulate tight junction assembly by activating the PKA signaling pathway and by reorganizing the actin cytoskeleton through the activation of the downstream effectors PRKACA and MICALL2 respectively. Through its role in tight junction assembly, may play a role in the establishment of Sertoli cell barrier. Plays also a role in angiogenesis through regulation of endothelial cells chemotaxis. Also involved in neurite outgrowth. Has also been proposed to play a role in post-Golgi membrane trafficking from the TGN to the recycling endosome. Finally, it has been involved in insulin-induced transport to the plasma membrane of the glucose transporter GLUT4 and therefore may play a role in glucose homeostasis.

[UniProtKB/Swiss-Prot Function]