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# S38A9 Rabbit Polyclonal Antibody

S38A9 Rabbit Polyclonal Antibody
Catalog # AP93431

## Product Information

| | |
|---|---|
| **Application** | WB |
| **Primary Accession** | Q8NBW4 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Polyclonal, Rabbit,IgG |
| **Clonality** | Polyclonal |
| **Calculated MW** | 63776 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 153129 |
| **Other Names** | Neutral amino acid transporter 9, Solute carrier family 38 member 9 {ECO:0000312\|HGNC:HGNC:26907}, Up-regulated in lung cancer 11 {ECO:0000303\|Ref.2}, SLC38A9 (HGNC:26907) |
| **Dilution** | WB~~1:1000 |
| **Storage Conditions** | -20℃ |

## Protein Information

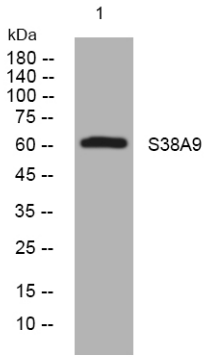
| | |
|---|---|
| **Name** | SLC38A9 ( HGNC:26907) |
| **Function** | Lysosomal amino acid transporter involved in the activation of mTORC1 in response to amino acid levels (PubMed:25561175, PubMed:25567906, PubMed:29053970). Probably acts as an amino acid sensor of the Rag GTPases and Ragulator complexes, 2 complexes involved in amino acid sensing and activation of mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids (PubMed:25567906, PubMed:29053970). Following activation by amino acids, the Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated (PubMed:25561175, PubMed:25567906). SLC38A9 mediates transport of amino acids with low capacity and specificity with a slight preference for polar amino acids (PubMed:25561175, PubMed:25567906). Acts as an arginine sensor (PubMed:25567906, PubMed:29053970, PubMed:31295473). Following activation by arginine binding, mediates transport of L- glutamine, leucine and tyrosine with high efficiency, and is required for the efficient utilization of these amino acids after lysosomal protein degradation (PubMed:29053970, PubMed:31295473). However, the transport mechanism is not well defined and the role of sodium is not clear (PubMed:25561175, PubMed:31295473). Can disassemble the lysosomal folliculin complex (LFC), and thereby triggers |

GAP activity of FLCN:FNIP2 toward RRAGC (PubMed:32868926). Acts as an cholesterol sensor that conveys increases in lysosomal cholesterol, leading to lysosomal recruitment and activation of mTORC1 via the Rag GTPases (PubMed:28336668). Guanine exchange factor (GEF) that, upon arginine binding, stimulates GDP release from RRAGA and therefore activates the Rag GTPase heterodimer and the mTORC1 pathway in response to nutrient sufficiency (PubMed:30181260).

**Cellular Location**

Lysosome membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q08BA4}. Late endosome membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q08BA4}

## Images




Western blot analysis of lysates from Hela cells, primary antibody was diluted at 1:1000, 4°over night

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.