

## Product datasheet for **TA306408**

### **SIN1 (MAPKAP1) Rabbit Polyclonal Antibody**

#### **Product data:**

|                       |   |
|-----------------------|---|
| Product Type:         | Primary Antibodies  |
| Applications:         | IF, IHC, WB   |
| Recommended Dilution: | WB: 0.5 - 1 ug/mL, ICC: 2.5 ug/mL, IF: 20 ug/mL   |
| Reactivity:           | Human, Mouse, Rat   |
| Host:                 | Rabbit  |
| Isotype:              | IgG   |
| Clonality:            | Polyclonal  |
| Immunogen:            | MAPKAP1 antibody was raised against a 19 amino acid peptide from near the amino terminus of human MAPKAP1.  |
| Formulation:          | PBS containing 0.02% sodium azide.  |
| Concentration:        | 1ug/ul  |
| Purification:         | Affinity chromatography purified via peptide column   |
| Conjugation:          | Unconjugated  |
| Storage:              | Store at -20°C as received.   |
| Stability:            | Stable for 12 months from date of receipt.  |
| Gene Name:            | mitogen-activated protein kinase associated protein 1   |
| Database Link:        | <a href="#">NP_001006618</a><br><a href="#">Entrez Gene 227743 Mouse</a> <a href="#">Entrez Gene 296648 Rat</a> <a href="#">Entrez Gene 79109 Human</a><br><a href="#">Q9BPZ7</a> |



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**Background:**

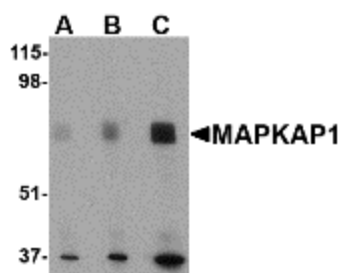
MAPKAP1 was initially identified as the human homolog of *S. pombe* SIN1. Recent evidence has shown that it is identical to Mip1, a protein that interacts with MEKK2, a member of the mitogen-activated protein kinase (MAPK) intracellular signaling network. MAPKAP1 is thought to prevent MEKK2 activation and dimerization by forming a complex with the inactive and non-phosphorylated MEKK2, thereby blocking the JNK1/2, ERK1/2, p38 and ERK5 MAPKs. MAPKAP1 has also been shown to play a role in the TOR signaling process, a pathway that is involved in controlling cell growth and proliferation in response to environmental cues such as nutrients, growth factors and hormones. Experiments showed that MAPKAP1 helped to maintain the TOR/ric1a assembly but not the TOR/RAPTOR complex, which allowed specific phosphorylation of Akt, a kinase that is believed to couple the growth factor-PI3K signaling pathway to the nutrient-regulated TOR signaling pathway. Multiple alternatively spliced isoforms of MAPKAP1 have been identified.

**Synonyms:**

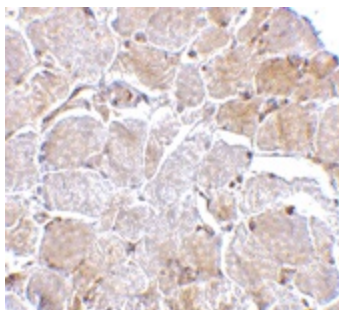
JC310; MIP1; SIN1; SIN1b; SIN1g

**Protein Families:**

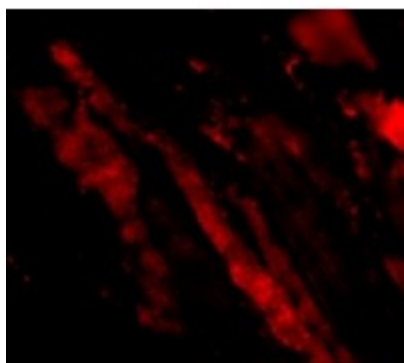
Druggable Genome

**Product images:**

Western blot analysis of MAPKAP1 in human skeletal muscle tissue lysate with MAPKAP1 antibody at (A) 0.5, (B) 1 and (C) 2 ug/ml.



Immunohistochemistry of MAPKAP1 in human skeletal muscle tissue with MAPKAP1 antibody at 2.5 ug/ml.



Immunofluorescence of MAPKAP1 in Human Skeletal Muscle cells with MAPKAP1 antibody at 20 ug/mL.