

## Product datasheet for **TA306661**

### AAK1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	WB: 1 - 2 ug/mL, ICC: 5 ug/mL, IF: 20 ug/mL
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Aak1 antibody was raised against a 20 amino acid peptide near the amino terminus of the human Aak1.
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:	AP2 associated kinase 1
Database Link:	<a href="#">NP_055726</a> <a href="#">Entrez Gene 269774 Mouse</a> <a href="#">Entrez Gene 500244 Rat</a> <a href="#">Entrez Gene 22848 Human</a> <a href="#">Q2M2I8</a>



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**Background:**

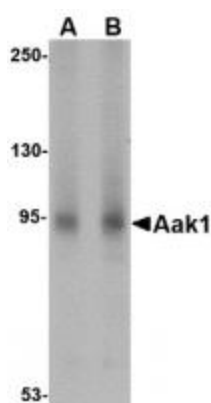
AP2-associated protein kinase 1 (Aak1) is a member of the Ark1/Prk1 subfamily of Ser/Thr protein kinases that are thought to regulate endocytosis by phosphorylating the accessory endocytic components. Aak1 interacts with and phosphorylates the mu2 subunit of the AP-2 complex, which promotes binding of the AP-2 to tyrosine based (Yxxf) internalization motif-containing receptors and subsequent receptor endocytosis. At least two isoforms of Aak1 are known to exist; the longer isoform contains an extended carboxy-terminus that contains an additional clathrin-binding domain. Overexpression of this long isoform or Aak1 depletion by RNA interference impairs transferrin recycling from the early/sorting endosome, suggesting that Aak1 functions at multiple steps of the endosomal pathway by regulating transferrin internalization and its recycling back to the plasma membrane.

**Synonyms:**

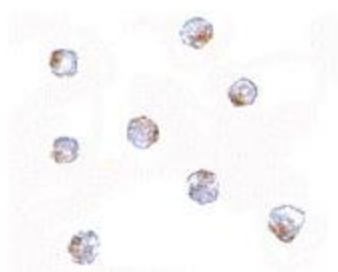
RP11-427H3.3

**Protein Families:**

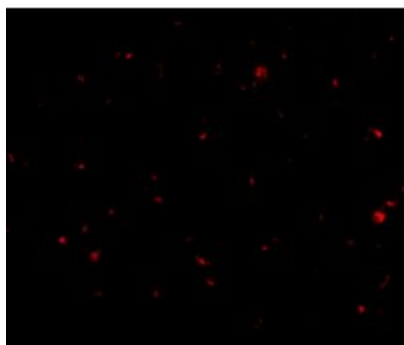
Druggable Genome, Protein Kinase

**Product images:**

Western blot analysis of Aak1 in A-20 lysate with Aak1 antibody at (A) 1 and (B) 2 ug/mL.



Immunocytochemistry of Aak1 in A-20 cells with Aak1 antibody at 5 ug/mL.



Immunofluorescence of aak1 in human brain tissue with aak1 antibody at 20 ug/mL.