

## Product datasheet for **TP727248**

### PIP5K2 alpha (PIP4K2A) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant Human Phosphatidylinositol 5-Phosphate 4-Kinase 2 $\alpha$ /PIP4K2A (C-6His)
Species:	Human
Expression cDNA Clone or AA Sequence:	Met1-Thr406
Tag:	C-His
Buffer:	Lyophilized from a 0.2 um filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
Note:	Recombinant Human Phosphatidylinositol 5-phosphate 4-kinase type-2 alpha is produced by our Mammalian expression system and the target gene encoding Met1-Thr406 is expressed with a 6His tag at the C-terminus.
Storage:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Stability:	12 months from date of despatch
Locus ID:	5305
UniProt ID:	<a href="#">P48426</a>
Synonyms:	1-phosphatidylinositol 5-phosphate 4-kinase 2-alpha;Diphosphoinositide kinase 2-alpha;PIP5KIII;Phosphatidylinositol 5-phosphate 4-kinase type II alpha;PtdIns(4)P-5-kinase B isoform;PtdIns(4)P-5-kinase C isoform;PtdIns(5)P-4-kinase isoform 2-alpha
Summary:	Phosphatidylinositol 5-phosphate 4-kinase type-2 alpha (PIP4K2A) is a member of the phosphatidylinositol-4-phosphate 5-kinase family. It contains 1 PIPK domain and is expressed ubiquitously, with high levels in the brain. It catalyzes the phosphorylation of phosphatidylinositol 5-phosphate (PtdIns5P) on the fourth hydroxyl of the myo-inositol ring, to form phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P <sub>2</sub> ). It may exert its function by regulating the levels of PtdIns5P, which functions in the cytosol by increasing AKT activity and in the nucleus signals through ING2. It may regulate the pool of cytosolic PtdIns5P in response to the activation of tyrosine phosphorylation, negatively regulate insulin-stimulated glucose uptake by lowering the levels of PtdIns5P. It also involved in thrombopoiesis, and the terminal maturation of megakaryocytes and regulation of their size.



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**Protein Families:** Druggable Genome

**Protein Pathways:** Inositol phosphate metabolism, Phosphatidylinositol signaling system, Regulation of actin cytoskeleton