

## Product datasheet for **AP06786PU-N**

### Actinin alpha (pan) Rabbit Polyclonal Antibody

#### Product data:

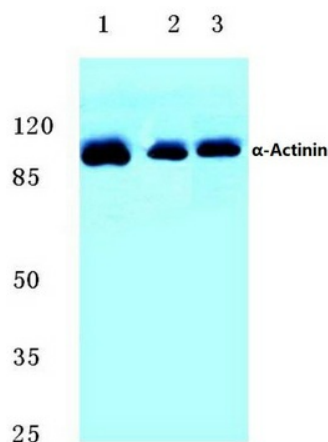
Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 30-60 of Human Actinin- $\alpha$ 1.
Specificity:	This antibody detects endogenous levels of Actinin- $\alpha$ 1/2/3/4 protein. (region surrounding Trp48)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 103 kDa



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**Background:**

The spectrin gene family encodes a diverse group of cytoskeletal proteins that include spectrins, dystrophins and  $\alpha$ -actinins. There are four tissue-specific  $\alpha$ -actinins, namely  $\alpha$ -actinin-1,  $\alpha$ -actinin-2,  $\alpha$ -actinin-3 and  $\alpha$ -actinin-4, which are localized to muscle and non-muscle cells, including skeletal, cardiac and smooth muscle cells, as well as within the cytoskeleton. Each  $\alpha$ -actinin protein contains one Actin-binding domain, two calponin-homology domains, two EF-hand domains and four spectrin repeats, through which they function as bundling proteins that can cross-link F-Actin, thus anchoring Actin to a variety of intracellular structures. Defects in the gene encoding  $\alpha$ -actinin-4 are the cause of focal segmental glomerulosclerosis 1 (FSGS1), a common renal lesion characterized by decreasing kidney function and, ultimately, renal failure.

**Product images:**


Western blot (WB) analysis of Actinin-1/2/3/4 antibody (Cat.-No.: AP06786PU-N) at 1/500 dilution.  
Lane 1: HeLa whole cell lysate  
Lane 2