

**AP06786PU-N****Polyclonal Antibody to Actinin alpha (pan) - Aff - Purified**

<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	<p>The spectrin gene family encodes a diverse group of cytoskeletal proteins that include spectrins, dystrophins and <math>\alpha</math>-actinins. There are four tissue-specific <math>\alpha</math>-actinins, namely <math>\alpha</math>-actinin-1, <math>\alpha</math>-actinin-2, <math>\alpha</math>-actinin-3 and <math>\alpha</math>-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 <math>\alpha</math>-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 <math>\alpha</math>-actinin-4 are the cause of focal segmental glomerulosclerosis 1 (FSGS1), a common renal lesion characterized by decreasing kidney function and, ultimately, renal failure.</p>
<b>Host:</b>	Rabbit
<b>Immunogen:</b>	Synthetic peptide, corresponding to amino acids 30-60 of Human Actinin- $\alpha$ 1.
<b>Format:</b>	<p><b>State:</b> Liquid purified Ig fraction</p> <p><b>Purification:</b> Affinity-chromatography using epitope-specific immunogen and the purity is &gt; 95% (by SDS-PAGE)</p> <p><b>Buffer System:</b> Phosphate buffered saline (PBS), pH 7.2.</p> <p><b>Preservatives:</b> 0.05% sodium azide</p>
<b>Applications:</b>	<p><b>Western blot:</b> 1/500-1/1000.</p> <p><b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200.</p> <p>Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
<b>Molecular Weight:</b>	~ 103 kDa
<b>Specificity:</b>	This antibody detects endogenous levels of Actinin- $\alpha$ 1/2/3/4 protein. (region surrounding Trp48)
<b>Species Reactivity:</b>	<p><b>Tested:</b> Human.</p> <p><b>Expected from sequence similarity:</b> Mouse and Rat.</p>
<b>Storage:</b>	<p>Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.</p> <p>Avoid repeated freezing and thawing.</p> <p>Shelf life: one year from despatch.</p>

**Pictures:**

**Western blot (WB) analysis of Actinin- $\alpha$ 1/2/3/4 antibody (Cat.-No.: AP06786PU-N) at 1/500 dilution.**

Lane1: HeLa whole cell lysate

Lane2: Mouse muscle tissue lysate

Lane3: Rat muscle tissue lysate

