

## Alpha-cardiac actin

Cat#: 0407-3

Quantity: 100ul

<b>Product Type</b>	Rabbit Polyclonal IgG, primary antibodies		
<b>Product Lot#</b>	See on the tube		
<b>Species Cross-reactivity</b>	Mouse, Human, Rat	<b>Project ID</b>	Pk010
<b>Tested Applications</b>	WB	<b>Form</b>	Liquid
<b>Positive control</b>	Mouse heart	<b>Concentration</b>	0.5mg/ml
<b>Cellular Localization</b>	Cytoplasm , etc.	<b>Molecular Wt.</b>	42kDa
<b>Database links</b>	SwissProt P68033 (mouse)	P68032(human)	

**Description:** Actins are highly conserved proteins expressed in all eucaryotic cells. Actin filaments form part of the cytoskeleton and play essential roles in regulating cell shape and movement. Six distinct actin isotypes have been identified in mammalian cells. Each is encoded by a separated gene and is expressed in a developmentally regulated and tissue-specific manner, alpha and beta cytoplasmic actins are expressed in a wide variety of cells; whereas, expression of alpha skeletal, alpha cardiac, alpha vascular, and gamma enteric actins are more restricted to specialized muscle cell type. Smooth muscle alpha actin is of further interest because it is one of a few genes whose expression is relatively restricted to vascular smooth muscle cells. Further more, expression of smooth muscle alpha actin is regulated by hormones, cell proliferation , and altered by pathological conditions including oncogenic transformation and atherosclerosis

**Specificity/Source:** This antibody is produced by immunizing rabbits with a synthetic peptide (KLH-coupled) corresponding to N-terminal residues of alpha-Actin.

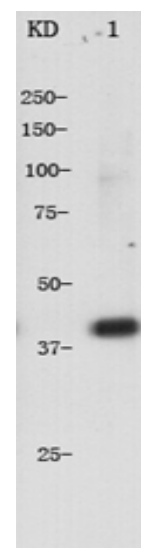
### Recommended Dilutions:

WB: 1:500-1:1,000

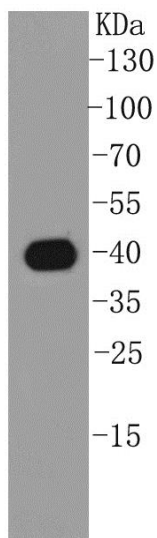
**Storage buffer:** 1\*TBS (pH7.4), 0.5%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

**Purity:** Immunogen affinity purified



**Fig1:** Western blot analysis on Mouse Heart using anti-a-Actin polyclonal antibody



**Fig2:** Western blot analysis on zebra fish tissue lysate using anti-a-Actin polyclonal antibody

**Background References:**

1. The MGC Project Team. *Genome Res.* 14:2121-2127(2004).
2. Leader D.P., Gall I., Campbell P.C. *Biosci. Rep.* 6:741-747(1986).
3. Carninci P., Kasukawa T., Katayama S.etc. *Science* 309:1559-1563(2005).