



## Anti-alpha smooth muscle Actin Antibody NH-R-02-64

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	IF-Tissue Clearing
Clone number:	SY02-64

Description:	All eukaryoticcells expressActin, which often constitutes as much as 50%
	of total cellular protein. Actin filaments can formboth stable and labile
	structures and are crucial components of microvilli and the contractile
	apparatus of muscle cells. While lower eukaryotes, such as yeast, have
	only one Actin gene, higher eukaryotes have several isoforms encoded by
	a family of genes. At leastsix types ofActin are present in mammalian
	tissues and fall into three classes. $\alpha$ -Actin expression is limited to various
	types of muscle, whereas $\beta$ -Actin and $\gamma$ -Actin are the principle constituents
	of filaments in other tissues. Members of the small GTPase family regulate
	the organization of the Actin cytoskeleton. Rho controls the assembly
	ofActin stress fibers and focal adhesion. Rac regulatesActin filament
	accumulation at the plasma membrane. Cdc42 stimulatesformation of
	filopodia.
Immunogen:	Synthetic peptide within N-terminal human alpha smooth muscleActin.
Positive control:	Mouse heart tissue, Mouse kidney tissue.
Subcellular location:	Cytoplasm.
Recommended Dilutions:	
IF-Tissue Clearing	1:100
Adaptive Clearing kit	Tissue clearing kit (Hydrophilic) (Cat#:NH-CR-210701)、Enhanced Tissue
	clearing kit(Cat#:NH-CR-230701)
Storage Buffer:	1*TBS(pH7.4), 0.05% BSA, 40% Glycerol. Preservative:0.05% Sodium Azide.
Storage Instruction:	Store at +4 $^\circ\!\mathrm{C}$ after thawing. Aliquot store at -20 $^\circ\!\mathrm{C}$ or -80 $^\circ\!\mathrm{C}$ . Avoid
	repeated freeze / thaw cycles.
Purity:	Protein A affinity purified

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## Images



Fig1: Immunofluorescence analysis of fresh mouse kidney tissue labeling alpha smooth muscle Actin (NH-R-02-64) at 1/100 dilution.

The section was treated with Tissue Clearing Kit(Hydrophilic) (Cat#:NH-CR-210701), the tissues were blocked for 2 hours at  $4^{\circ}$ C, washed with PBS, and then probed with the primary antibody (NH-R-02-64,1/100) overnight at  $4^{\circ}$ C, washed with PBS. Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) was used as the secondary antibody at 1/100 dilution. Image acquisition was performed with Zeiss 980.

Fig2: Immunofluorescence analysis of fresh mouse heart tissue labeling alpha smooth muscle Actin (NH-R-02-64) at 1/100 dilution.

The section was treated with Tissue Clearing Kit(Hydrophilic) (Cat#:NH-CR-210701), the tissues were blocked for 2 hours at  $4^{\circ}$ C, washed with PBS, and then probed with the primary antibody (NH-R-02-64,1/100) overnight at  $4^{\circ}$ C, washed with PBS. Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) was used as the secondary antibody at 1/100 dilution. Image acquisition was performed with Zeiss 980.

