



Actin- α/γ Polyclonal Antibody

Catalog No	YP-Ab-03080
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	ACTC1
Protein Name	Actin alpha cardiac muscle 1
Immunogen	The antiserum was produced against synthesized peptide derived from human Actin. AA range:21-70
Specificity	Actin- α/γ Polyclonal Antibody detects endogenous levels of Actin- α/γ protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	ACTC1; ACTC; Actin; alpha cardiac muscle 1; Alpha-cardiac actin; ACTG1; ACTB; ACTG; Actin, cytoplasmic 2; Gamma-actin; ACTG2; ACTA3; ACTL3; ACTSG; Actin, gamma-enteric smooth muscle; Alpha-actin-3; Gamma-2-actin; Smooth muscle gamma-actin;
Observed Band	45kD
Cell Pathway	Cytoplasm, cytoskeleton.
Tissue Specificity	Muscle,Tongue,
Function	disease:Defects in ACTC1 are the cause of cardiomyopathy dilated type 1R (CMD1R) [MIM:102540]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.,disease:Defects in ACTC1 are the cause of cardiomyopathy familial hypertrophic type 11 (CMH11) [MIM:612098]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to



malignant forms with high risk of cardiac failure and sudden cardiac death.,function:Actins are highly conserv

Background

Actins are highly conserved proteins that are involved in various types of cell motility. Polymerization of globular actin (G-actin) leads to a structural filament (F-actin) in the form of a two-stranded helix. Each actin can bind to four others. The protein encoded by this gene belongs to the actin family which is comprised of three main groups of actin isoforms, alpha, beta, and gamma. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. Defects in this gene have been associated with idiopathic dilated cardiomyopathy (IDC) and familial hypertrophic cardiomyopathy (FHC). [provided by RefSeq, Jul 2008],

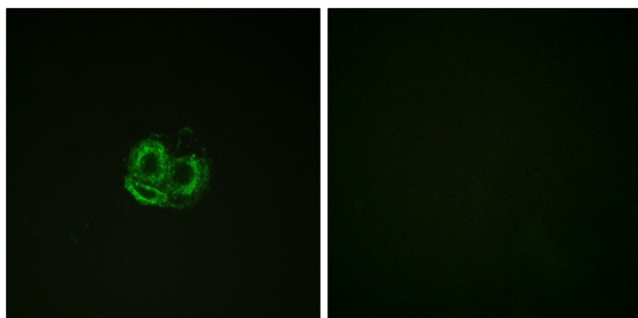
matters needing attention

Avoid repeated freezing and thawing!

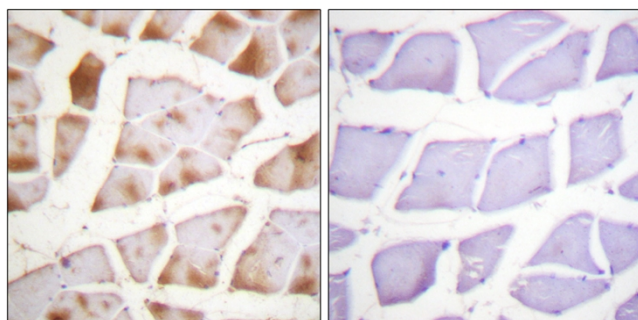
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

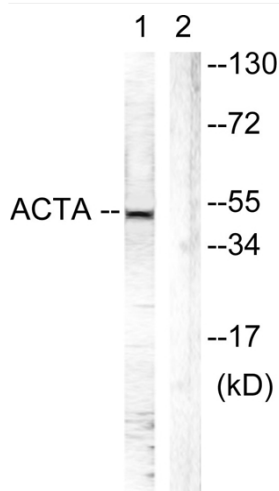
Products Images



Immunofluorescence analysis of HUVEC cells, using Actin-pan Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human skeletal muscle tissue, using Actin-pan Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from mouse brain, using Actin-pan Antibody. The lane on the right is blocked with the synthesized peptide.