Best Tools for immunology Research

Actin-α/γ Polyclonal Antibody

Catalog No :	YT0104
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Actin-α/γ
Fields :	>>Cardiac muscle contraction;>>Adrenergic signaling in cardiomyocytes;>>Hypertrophic cardiomyopathy;>>Dilated cardiomyopathy
Gene Name :	ACTC1
Protein Name :	Actin alpha cardiac muscle 1
Human Gene Id :	58/70/71/72
Human Swiss Prot No :	P68032/P63261/P63267/P68133
Mouse Gene Id :	11464/11465/11468/11459
Rat Gene Id :	29275/100361457/25365/29437
Rat Swiss Prot No :	P68035/P63259/P63269/P68136
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
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 45kD

Cell Pathway : Cardiac muscle contraction;Hypertrophic cardiomyopathy (HCM);Dilated cardiomyopathy;

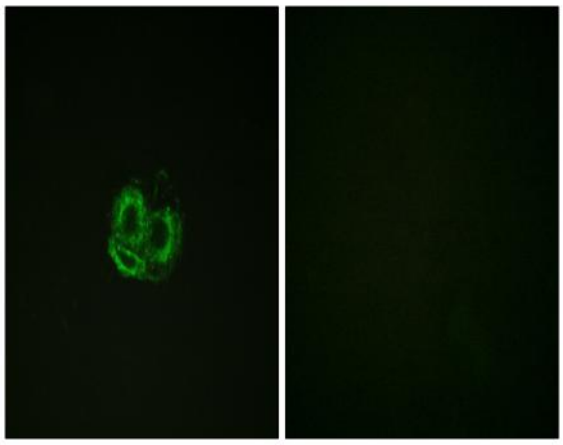
Background : Actins are highly conserved proteins that are involved in various types of cell motility. Polymerization of globular actin (G-actin) leads to a structural filament (F-actin) in the form of a two-stranded helix. Each actin can bind to four others. The protein encoded by this gene belongs 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],

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

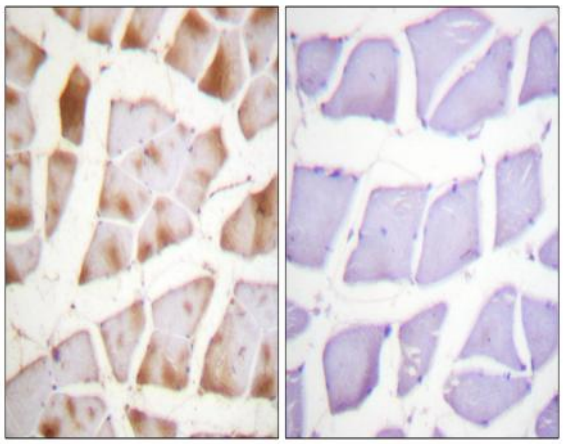
Subcellular Location : Cytoplasm, cytoskeleton.

Expression : Muscle,Tongue,

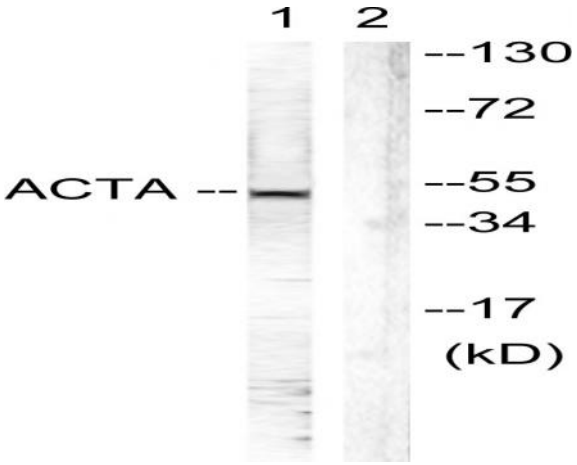
Products Images



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.