

Product overview

product name	Anti β -actin Polyclonal Antibody
catalog No.	ATPA00016Rb
Category	Primary antibody
Host	Rabbit
Species specificity	Human,Rat,Mouse
Tested applications	WB
Clonality	Polyclonal
Clone No.	/
Conjugation	Unconjugated
Immunogen	Recombinant protein of human β -tubulin (Met1~Ala444).
Alternative Names	β -actin,ACTB, Actin, actin, beta, Actin, cytoplasmic 1,B actin, Beta actin, F actin.
Uniprot ID	P60709

Product performance

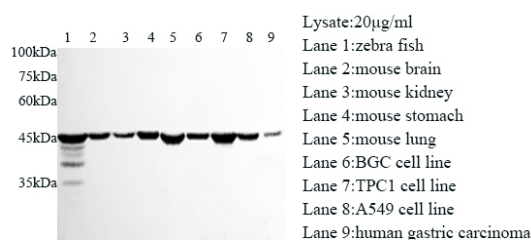
Form	Liquid
Buffer	Supplied as solution form in PBS, pH7.4, containing 0.02% NaN ₃ , 50% glycerol.
Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 4 °C for frequent use. Store at -20 to -80 °C for twelve months from the date of receipt.
Concentration	0.5mg/ml
Isotype	IgG
MW	42kDa
Purity	Antigen affinity purification

Dilution range

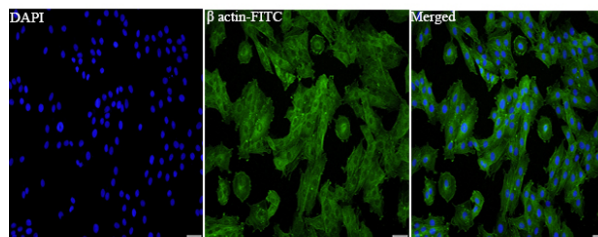
WB: 1:1000-1:3000

Product experiment picture

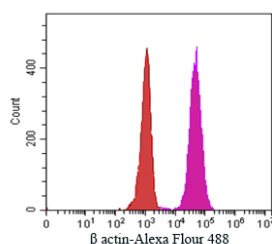




Various lysates were subjected to SDS PAGE followed by western blot with β actin antibody at dilution of 1:3000.



Immunofluorescent analysis of H929 cells using β actin antibody at dilution of 1:100 and Alexa Fluor-488 conjugated Affinipure Goat anti rabbit IgG(H+L).



1×10^6 THP-1 cells were stained with 1:100 β actin antibody (purple) and control antibody (red). Fixed with 4% PFA blocked with BSA (30min). Alexa Fluor 488-conjugated antibody dilution 1:100.

Product background

Actins are highly conserved globular proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. At least six isoforms of actins are known in mammals and other vertebrates: alpha (ACTC1, cardiac muscle 1), alpha 1 (ACTA1, skeletal muscle) and 2 (ACTA2, aortic smooth muscle), beta (ACTB), gamma 1 (ACTG1) and 2 (ACTG2, enteric smooth muscle). Beta and gamma 1 are two non-muscle actin proteins. Most actins consist of 376aa, while ACTG2 (rich in muscles) has 375aa and ACTG1 (found in non-muscle cells) has only 374aa. Beta actin has been widely used as the internal control in RT-PCR and Western Blotting as a 42-kDa protein. However, the 41 kDa cleaved fragment of beta actin can be generated during apoptosis process. This antibody can recognize all the actins.