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Date : 2018/01/04

Catalog Number GTX109639 Package:25 µl,100 µl ★★★★★ (9) Reference (173)

Product Name beta Actin antibody

Full Name actin, beta

Synonyms PS1TP5BP1 antibody, ACTB antibody, actin, cytoplasmic 1 antibody, beta cytoskeletal actin antibody, PS1TP5-binding protein 1 antibody, actin, beta antibody

Background This gene encodes one of six different actin proteins. Actins are highly conserved proteins that are involved in cell motility, structure, and integrity. This actin is a major constituent of the contractile apparatus and one of the two nonmuscle cytoskeletal actins. [provided by RefSeq]

Host Rabbit

Clonality Polyclonal

Isotype IgG

Immunogen Carrier-protein conjugated synthetic peptide encompassing a sequence within the C-terminus region of human beta Actin. The exact sequence is proprietary.

Antigen Species Human

Species Reactivity Human, Mouse, Drosophila, Pig, Rat, Yeast, Cat, Plant, Rice, Candida albicans

Predicted Cross Reactivity species Japanese Medaka, Xenopus laevis, Dog, Rabbit, Chicken, Sheep, Rhesus Monkey, Chimpanzee, Bovine, Guinea pig

Predict Reactivity Note Japanese Medaka (98%), Xenopus laevis (99%), Dog (100%), Rabbit (99%), Chicken (100%), Sheep (100%), Rhesus Monkey (100%), Chimpanzee (100%), Bovine (100%), Guinea pig (100%)

Applications ICC/IF, IHC-P, IP, WB, IB

Application Note

	Suggested dilution	Reference
Immunocytochemistry/ Immunofluorescence (ICC/IF)	1:100-1:1000*	
IHC (Formalin-fixed paraffin-embedded sections)	1:100-1:1000*	
Immunoprecipitation	Assay-dependent dilution	
Western Blot (WB)	1:500-1:20000*	
Immunoblotting	Assay-dependent dilution	

Not tested in other applications.
*Optimal dilutions/concentrations should be determined by the researcher.

Positive Controls 293T , A341 , Jurkat , Raji , HeLa , HepG2 , H1299 , HCT116 , MCF-7 , NT2D1 , PC-3 , U87-MG , NIH-3T3 , mouse brain , PC-12 , Rat2 , Rat brain , drosophila , Yeast lysate , Candida albicans (sc5314) whole cell lysate , *Rice leaf , *mouse aorta , *H9C2 , *OKT3 , *mouse ileum tissue , *mouse heart tissue , *mouse skeletal muscle tissue , *mouse brain tissue , *human periodontal ligament

Predicted Target Size 42 kDa

Cellular Localization Cytoplasm , cytoskeleton

Conjugation Unconjugated

Form Supplied Liquid

Purification Purified by antigen-affinity chromatography.

Concentration 0.1 mg/ml (Please refer to the vial label for the specific concentration)

Storage Buffer 1XPBS, 1% BSA, 20% Glycerol (pH7). 0.025% ProClin 300 was added as a preservative.

Storage Instruction Keep as concentrated solution. Aliquot and store at -20ºC or below. Avoid multiple freeze-thaw cycles.

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Notes	For *In vitro* laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.
ResearchArea	Cell Biology > Cytoskeleton Signal Transduction > ECM/Cytoskeleton > Cytoskeleton

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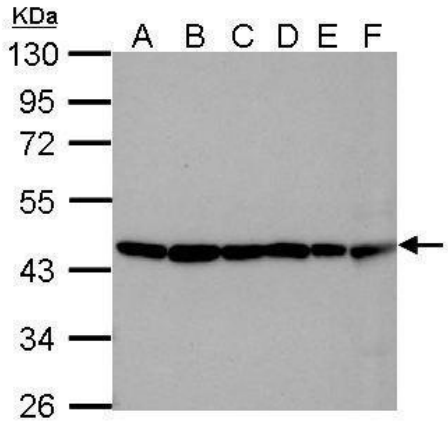

GTX109639 WB Image

Sample (30 µg of whole cell lysate)
A: 293T

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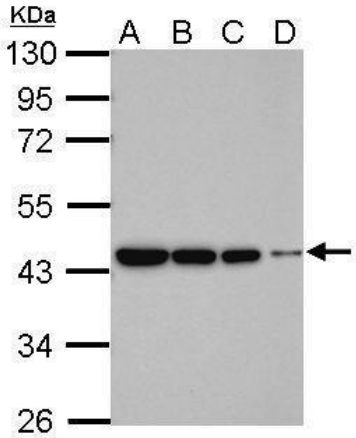
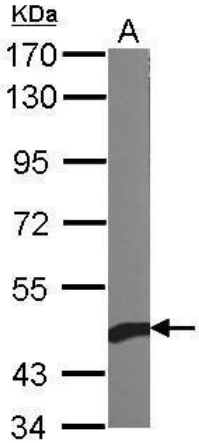
B: NTH-3T3
C: mouse brain
D: PC-12
E: Rat brain
F: drosophila
10% SDS PAGE
GTX109639 diluted at 1:10000
The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.



GTX109639 WB Image

Sample (whole cell lysate)
A: 293T 20ug
B: 293T 10ug
C: 293T 5ug
D: 293T 1ug
10% SDS PAGE
GTX109639 diluted at 1:5000
The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.



GTX109639 WB Image

Sample (10 µg of whole cell lysate)
A: Yeast lysate
7.5% SDS PAGE
GTX109639 diluted at 1:1000
The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.

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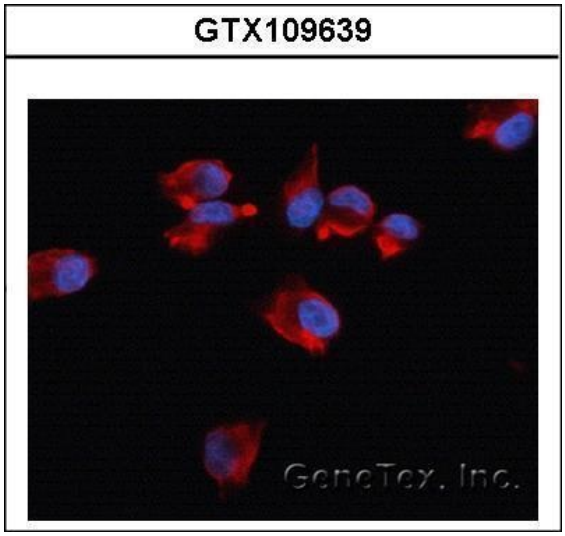
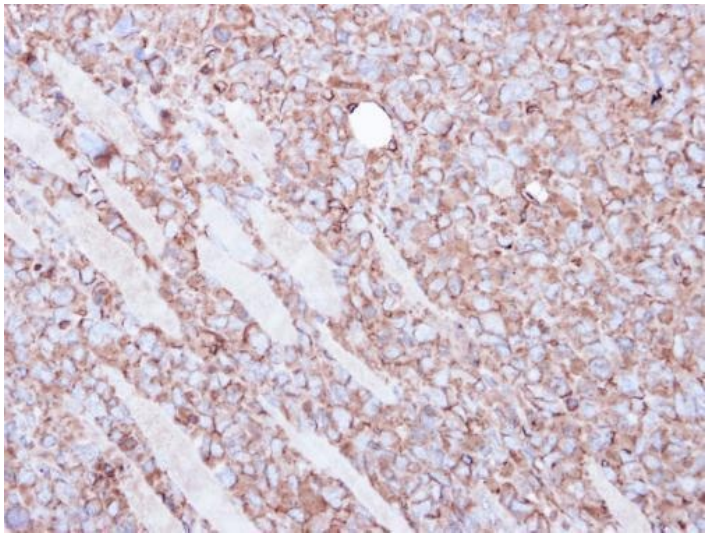


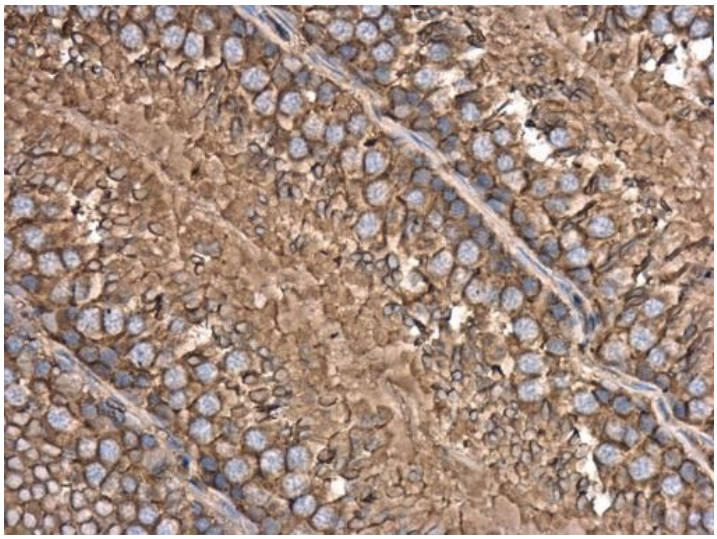
GTX109639 ICC/IF Image

Immunofluorescence analysis of methanol-fixed HeLa, using Beta-actin (GTX109639) antibody at 1:500 dilution.



GTX109639 IHC-P Image

Immunohistochemical analysis of paraffin-embedded H1299 xenograft, using Beta actin(GTX109639) antibody at 1:100 dilution.



GTX109639 IHC-P Image

beta Actin antibody detects beta Actin protein at cytoplasm in rat testis by immunohistochemical analysis.

Sample: Paraffin-embedded rat testis.

beta Actin antibody (GTX109639) diluted at 1:500.

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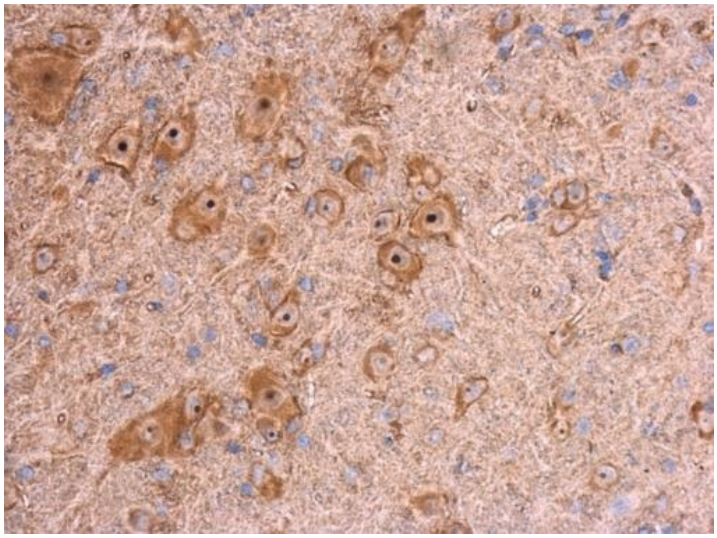
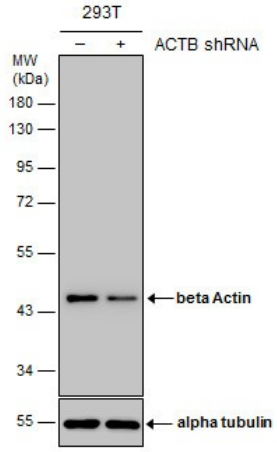


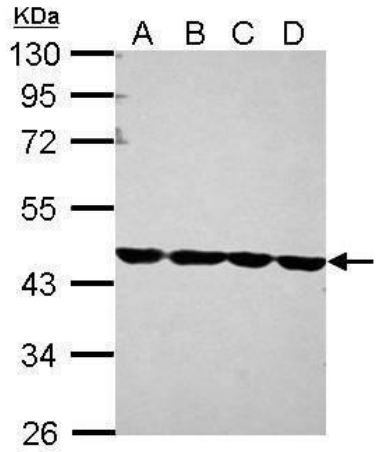
GTX109639 IHC-P Image

beta Actin antibody detects beta Actin protein at cytoplasm in mouse brain by immunohistochemical analysis.
Sample: Paraffin-embedded mouse brain.
beta Actin antibody (GTX109639) diluted at 1:500.



GTX109639 WB Image

Non-transfected (–) and transfected (+) 293T whole cell extracts (10 µg) were separated by 10% SDS-PAGE, and the membrane was blotted with beta Actin antibody (GTX109639) diluted at 1:15000. The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.



GTX109639 WB Image

Sample (30 µg of whole cell lysate)
A: 293T
B: A431
C: Jurkat
D: Raji
10% SDS PAGE
GTX109639 diluted at 1:1000
The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.

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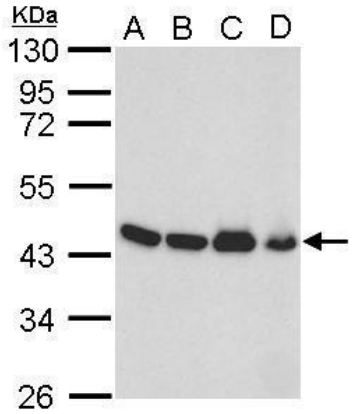
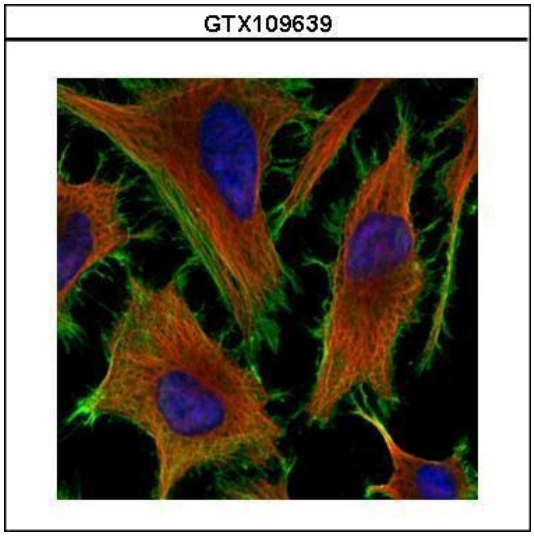


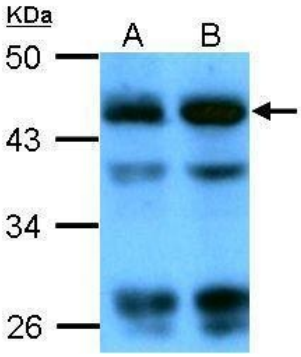
GTX109639 WB Image

beta Actin antibody detects ACTB protein by western blot analysis.
A. 50 µg mouse brain lysate/extract
B. 50 µg mouse kidney lysate/extract
C. 50 µg mouse lung lysate/extract
D. 50 µg mouse testis lysate/extract
10% SDS-PAGE
beta Actin antibody (GTX109639) dilution: 1:10000
The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.



GTX109639 ICC/IF Image

Confocal immunofluorescence analysis (Olympus FV10i) of methanol-fixed HeLa, using beta Actin(GTX109639) antibody (Green) at 1:200 dilution. Alpha-tubulin filaments were labeled with GTX11304 (Red) at 1:2000.



GTX109639 WB Image

Sample (whole cell lysate)
A: Candida albicans (sc5314) 20ug
B: Candida albicans (sc5314) 40ug
10% SDS PAGE
GTX109639 diluted at 1:4000
The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.

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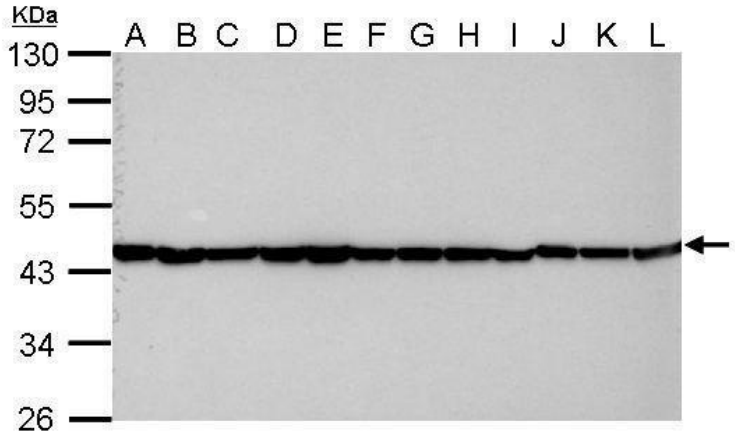
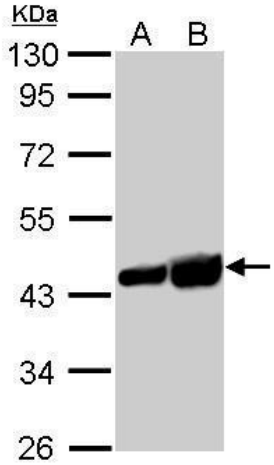


GTX109639 WB Image

Sample (30 µg of whole cell lysate)
A: Jurkat
B: Raji
C: 293T
D: A431
E: HeLa
F: HepG2
G: H1299
H: HCT116
I: MCF-7
J: NT2D1
K: PC-3
L: U87-MG
10% SDS PAGE
GTX109639 diluted at 1:10000
The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.



GTX109639 WB Image

beta Actin antibody detects ACTB protein by western blot analysis.
A. 30 µg PC-12 whole cell lysate/extract
B. 30 µg Rat-2 whole cell lysate/extract
10% SDS-PAGE
beta Actin antibody (GTX109639) dilution: 1:5000
The HRP-conjugated anti-rabbit IgG antibody (GTX213110-01) was used to detect the primary antibody.

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