

Datasheet for ABIN724340
anti-beta Actin antibody (AA 1-50)

43 Images

270 Publications

[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	beta Actin (ACTB)
Binding Specificity:	AA 1-50
Reactivity:	Human, Mouse, Rat, Rabbit, Pig, Cow
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This beta Actin antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p))

Product Details

Immunogen:	MAP conjugated synthetic peptide derived from human beta Actin
Isotype:	IgG
Cross-Reactivity:	Cow, Dog, Goat, Human, Mouse, Pig, Rabbit, Rat, Sheep, Various Species
Purification:	Purified by Protein A.

Target Details

Target:	beta Actin (ACTB)
Alternative Name:	beta Actin (ACTB Products)

Target Details

Background:	Synonyms: BRWS1, PS1TP5BP1, Actin, cytoplasmic 1, Beta-actin, ACTB Background: Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
Gene ID:	60
UniProt:	P60709
Pathways:	Myometrial Relaxation and Contraction , Cell-Cell Junction Organization , Maintenance of Protein Location , Phototransduction

Application Details

Application Notes:	WB 1:100-1000 IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C for 12 months.
Expiry Date:	12 months

Publications

Product cited in:	Chen, Pan, Tang, Cheng, Zhao, Zhang, Liao, Liu, Zhuang, Zhang, Chen, Lei, Li, Li, Wang, Wan: " Arginine is neuroprotective through suppressing HIF-1α/LDHA-mediated inflammatory response after cerebral ischemia/reperfusion injury." in: Molecular brain , Vol. 13, Issue 1, pp. 63 , (2021) (PubMed).
-------------------	---

Li, Jiang, Ye, Zhou, Liu, Yang, Hao, Hu: "P2Y14 receptor has a critical role in acute gouty arthritis by regulating pyroptosis of macrophages." in: **Cell death & disease**, Vol. 11, Issue 5, pp. 394, (2021) ([PubMed](#)).

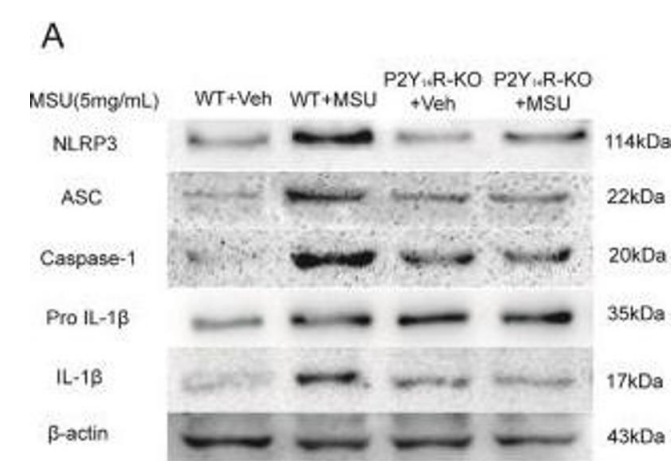
Yang, Tang, Wang, Zhang, Zan: "Melatonin promotes triacylglycerol accumulation via MT2 receptor during differentiation in bovine intramuscular preadipocytes." in: **Scientific reports**, Vol. 7, Issue 1, pp. 15080, (2019) ([PubMed](#)).

Huang, Zhu, Yi, Yan, Wei, Yang, Chen, Huang: "A novel TRAIL mutant-TRAIL-Mu3 enhances the antitumor effects by the increased affinity and the up-expression of DR5 in pancreatic cancer." in: **Cancer chemotherapy and pharmacology**, Vol. 82, Issue 5, pp. 829-838, (2019) ([PubMed](#)).

Lai, Jiang, Xie, Liu, Tang, Xiao, Gao, Jia, Bai: "Intestinal Pathology and Gut Microbiota Alterations in a Methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) Mouse Model of Parkinson's Disease." in: **Neurochemical research**, Vol. 43, Issue 10, pp. 1986-1999, (2019) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)

Images



Western Blotting

Image 1. NLRP3 inflammasome activation was involved in P2Y14R deficiency.a The NLRP3 inflammasome activation and IL-1β mutation in synovium was inhibited in P2Y14R-KO rats detected by western blotting. The relative optical density was exhibited in the supplementary materials (n=4). b Immunofluorescence assay confirmed that MSU-induced NLRP3 inflammasome activation in synovial tissue of WT but not P2Y14R-KO rats. NLRP3 protein was marked with Alexa Fluor 488 (Green). ASC protein was marked with Alexa Fluor 647 (Red). DAPI (Blue) was used to mark the nucleus. c The expression of NLRP3 inflammasome activation was inhibited under P2Y14R knockdown. P2Y14R siRNA was used to transfect THP-1 cells for 48h, followed by MSU stimulation for 12h. The relative optical density was

exhibited in the supplementary materials (n=4). d ELISA kit data showed that the release of IL-1 β decreased when P2Y14R was knockdown with siRNA. e Immunofluorescence assay revealed that MSU administration could not induce the NLRP3 inflammasome activation anymore in siP2Y14R THP-1 cells. NLRP3 protein was marked with Alexa Fluor 488 (Green). ASC protein was marked with Alexa Fluor 647 (Red). DAPI (Blue) was used to mark the nucleus. f The intracellular cAMP level in synovial tissue increased in P2Y14R-KO rats compared WT ones (n=6). g The intracellular cAMP level in THP-1 cells increased under P2Y14R knockdown (n=4). The data were presented as means \pm SDs. One-way analysis of variance (ANOVA) with Tukey multiple comparison test was performed. Compared with WT/NC+vehicle group: #P<0.05, ##P<0.01, ###P<0.001. Compared with WT/NC+MSU group: *P<0.05, **P<0.01, ***P<0.001 (n=4). - figure provided by CiteAb. Source: PMID32457291

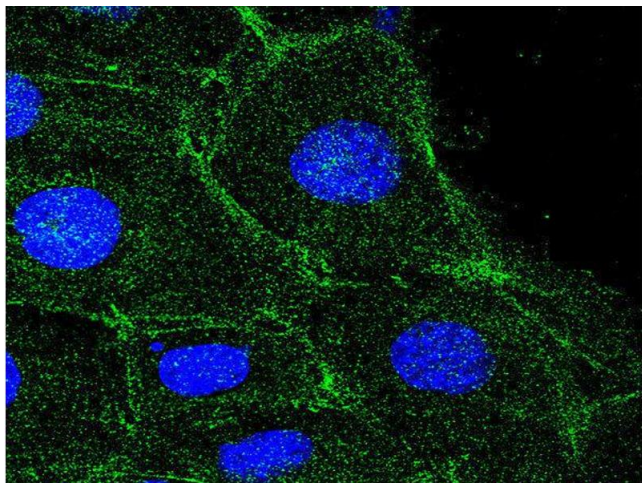
12%Gel
Rat lung

beta-actin
(42kD)



SDS-PAGE

Image 2. Rat lung lysate 30ug, probed (ABIN724340) at 1:200 overnight in 4 °C. Followed by conjugation to the secondary antibody at 1:3000 90min in 37 °C. Predicted and observed band size: 42kDa.



Immunofluorescence

Image 3. Image kindly submitted by Piotr Mamczur from Wroclaw University. Immunofluorescent localization of beta actin in mouse squamous cell cancer (KLN-205 cell line) with BS-0061R (1:50) antibody and FITC-labeled secondary antibodies (1:2000). The nuclei were stained with DAPI.

Please check the [product details page](#) for more images. Overall 43 images are available for ABIN724340.