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Anti-Ubiquitin UBB Rabbit Monoclonal Antibody

Catalog Number: M02848-3

Overview

Product Name	Anti-Ubiquitin UBB Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Ubiquitin UBB Rabbit Monoclonal Antibody catalog # M02848-3. Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Monoclonal DIG-21
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P0CG47

Technical Details

Immunogen	A synthesized peptide derived from human Ubiquitin
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5mg/ml
Purification	Affinity-chromatography
Suggested Dilutions	WB 1:500-2000 IHC 1:50-200 ICC/IF 1:50-200 FC 1:50

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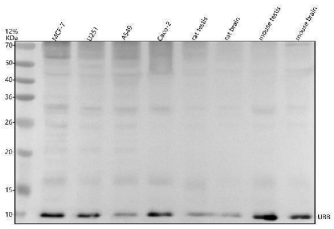
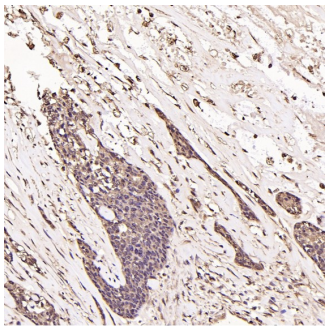
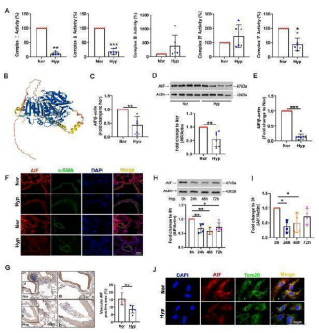
Anti-Ubiquitin UBB Rabbit Monoclonal Antibody (M02848-3) Images



Western blot analysis of Ubiquitin/UBB using anti-Ubiquitin/UBB antibody (M02848-3). Electrophoresis was performed on a 12% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human MCF-7 whole cell lysates, Lane 2: human U251 whole cell lysates, Lane 3: human A549 whole cell lysates, Lane 4: human Caco-2 whole cell lysates, Lane 5: rat testis tissue lysates, Lane 6: rat brain tissue lysates, Lane 7: mouse testis tissue lysates, Lane 8: mouse brain tissue lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Ubiquitin/UBB antigen affinity purified monoclonal antibody (M02848-3) at 1: 1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for Ubiquitin/UBB at approximately 10 kDa. The expected band size for Ubiquitin/UBB is at 26 kDa.



Immunohistochemical analysis of paraffin-embedded Human breast cancer, using the Antibody at 1:250 dilution.



Hypoxia results in decreased AIF expression. A Activity of mitochondrial respiratory chain complexes I–V after exposure to hypoxia, with complex I showing the most severe damage (n = 6). B Schematic structural model of AIF protein. C Decreased AIF expression was found in plasma from the hypoxic group (n = 5). D , E AIF protein and RNA levels in the lung tissues of the hypoxic model (n = 8). F , G The location of AIF in the smooth muscle layer of lung tissues from the hypoxic model was determined by immunofluorescence (F , Scale bar = 100 um) and immunohistochemical staining analysis (G , Scale bar = 200 um) (n = 3). H , I Time course of AIF protein and RNA levels in PASMCs 0, 24, 48, and 72 h after hypoxia treatment. J Subcellular distribution of AIF in PASMCs as determined by immunofluorescence analysis. Scale bars: 50 um (n = 3). All data are presented as the means ± standard deviation. *p<0.05; **p<0.01; ***p<0.001; Nor

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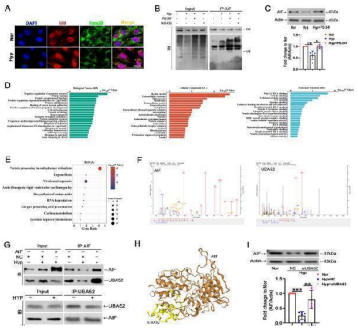
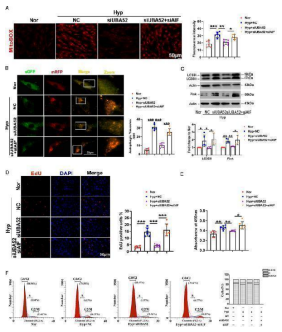
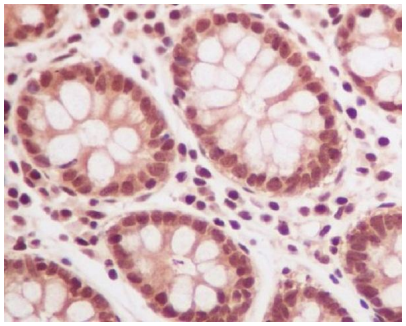
normoxia, Hyp hypoxia Index in PubMed under a CC BY license. PMID: 35090552



UBA52 participates in AIF ubiquitination, leading to its degradation by the proteasome system. A The colocalization of ubiquitin (UB) and Tom20 was determined using immunofluorescence (n = 3). Scale bars: 50 um. B PASMCs were exposed to normoxia or hypoxia for 24 h, and co-IP assay was performed using anti-AIF, followed by probing with anti-UB (n = 3). C Cells were treated with or without PS-341 for 24 h, and the expression levels of AIF and beta-actin were examined (n = 6). D , E GO and KEGG analysis of proteins interacting with AIF. F Mass spectrometry of specific segments of AIF and UBA52. G After PASMCs were exposed to normoxia or hypoxia, whole cell lysates were extracted for co-IP assay with anti-AIF or anti-UBA52, followed by probing with anti-UBA52 or anti-AIF (n = 3). H Representative predicted binding sites and structures of UBA52 and AIF. I PASMCs were transfected with si-UBA52 and then exposed to hypoxia, and the protein expression of AIF was estimated with beta-actin serving as the standard (n = 6). All data are presented as the means ± standard deviation. *p<0.05; **p<0.01; ***p<0.001; Nor normoxia, Hyp hypoxia, NC negative control, si small interfering RNA Index in PubMed under a CC BY license. PMID: 35090552



UBA52/AIF axis is responsible for increased cell autophagy and proliferation in response to hypoxia treatment. A Mitochondrial ROS was visualized by the mitochondrially targeted superoxide indicator (MitoSOX). Treatment with UBA52 siRNA blocked the increase in MitoSOX under hypoxia, whereas UBA52 plus AIF siRNA reversed this effect (n = 6). Scale bars: 50 um. B Representative autophagic flux monitored by eGFP-mRFP LC3 plasmid transfection. The formation of autophagosomes was calculated (n = 6). Scale bars: 50 um. C Western blot analysis of LC3BII and Pink in PASMCs cotransfected with UBA52 and AIF siRNA (n = 5). D , E CCK8 and 5-ethynyl-2-deoxyuridine (EdU) assays were used to determine the effects of UBA52 and AIF on cell proliferation (n = 6). F The number of cells in each phase of the cell cycle was examined by flow cytometry (n = 3). All data are presented as the means ± standard deviation. *p<0.05; **p<0.01; ***p<0.001; Nor normoxia, Hyp hypoxia, NC negative control, si small interfering RNA Index in PubMed under a CC BY license. PMID: 35090552



Immunohistochemical analysis of paraffin-embedded human colon, using Ubiquitin Antibody.

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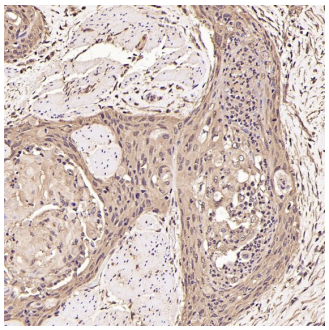
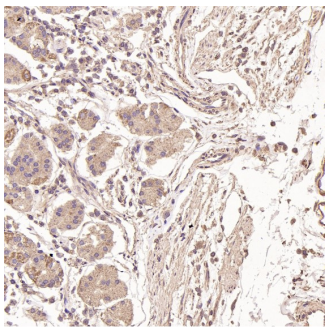
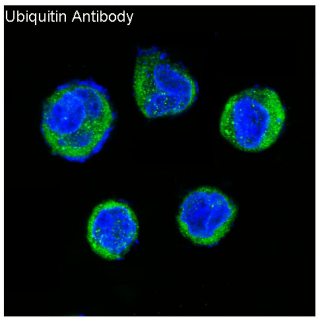


Immunohistochemical analysis of paraffin-embedded Human esophageal carcinoma, using the Antibody at 1:250 dilution.



Immunohistochemical analysis of paraffin-embedded Human stomach, using the Antibody at 1:250 dilution.



Immunofluorescent analysis of Raji cells, using Ubiquitin Antibody .

Anti-Ubiquitin UBB Rabbit Monoclonal Antibody

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