Cathepsin B Recombinant Rabbit Monoclonal Antibody (JA11-02)

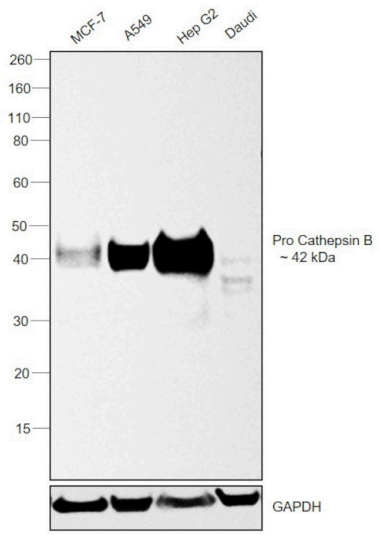
Product Details	
Size	100 µL
Species Reactivity	Human
Published Species	Human
Host/Isotype	Rabbit / IgG
Expression system	HEK293 cells
Class	Recombinant Monoclonal
Type	Antibody
Clone	JA11-02
Conjugate	Unconjugated
Immunogen	Recombinant protein within Human Cathepsin B aa 7-176
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	TBS, pH 7.4, with 40% Glycerol, 0.05% BSA
Contains	0.05% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2809928

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:1,000	3 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:50-1:200	-
Immunocytochemistry (ICC/IF)	1:50-1:200	-

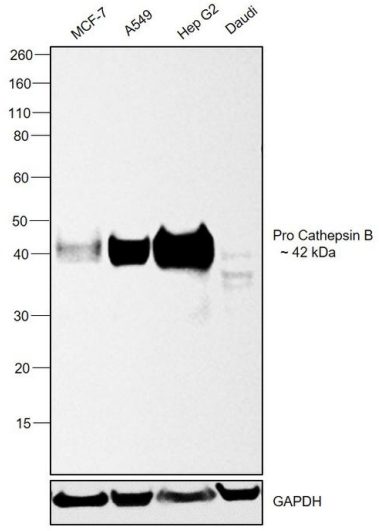
Product Specific Information

Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

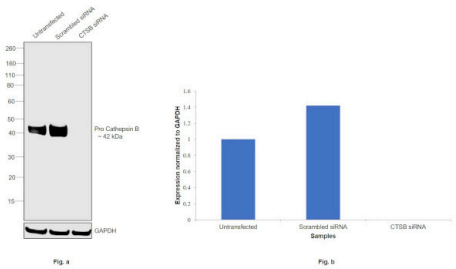
Product Images For Cathepsin B Recombinant Rabbit Monoclonal Antibody (JA11-02)



Cathepsin B Antibody (MA5-32651)
Antibody specificity was demonstrated by detection of differential basal expression of the target across cell lines owing to their inherent genetic constitution. Relative expression of Pro-cathepsin B was observed in MCF-7, A549 and HepG2 in comparison to Daudi using Anti-Cathepsin B Recombinant Rabbit Monoclonal Antibody (JA11-02) (Product # MA5-32651) in Western Blot. {RE}



Cathepsin B Antibody (MA5-32651) in WB
Western blot was performed using Anti-Cathepsin B Recombinant Rabbit Monoclonal Antibody (JA11-02)(Product # MA5-32651) and a 42kDa band corresponding to Pro Cathepsin B was observed across cell lines tested except Daudi which is reported to be low. Whole cell extracts (60 µg lysate) of MCF7 (Lane 1), A549 (Lane 2), Hep G2 (Lane 3) and Daudi (Lane 4) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0321BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1: 4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using SuperSignal™ West Dura Extended Duration Substrate (Product # 34076).



Cathepsin B Antibody (MA5-32651)
Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. MCF7 cells were transfected with Cathepsin B siRNA and decrease in signal intensity was observed in Western Blot application using Anti-Cathepsin B Recombinant Rabbit Monoclonal Antibody (JA11-02) (Product # MA5-32651). {KD}

View more figures on thermofisher.com

3 References

Western Blot (3)

Antiviral research

SARS-CoV-2 Permissive glioblastoma cell line for high throughput antiviral screening.

"Published figure using Cathepsin B recombinant monoclonal antibody (Product # MA5-32651) in Western Blot"

Authors: Vanhulle E,Stroobants J,Provinciael B,Camps A,Noppen S,Maes P,Vermeire K

Year
2022

International journal of molecular sciences

ANP and BNP Exert Anti-Inflammatory Action via NPR-1/cGMP Axis by Interfering with Canonical, Non-Canonical, and Alternative Routes of Inflammasome Activation in Human THP1 Cells.

"MA5-32651 was used in Western Blotting to aim to decipher the molecular mechanism underlying NPs effects on THP-1 cells stimulated with lipopolysaccharide (LPS) + ATP. Involvement of cGMP and PKG-I were assessed pre-treating THP-1 cells with the membrane-permeable analogue, 8-Br-cGMP, and the specific inhibitor KT-5823, respectively."

Authors: Mezzasoma L,Talesa VN,Romani R,Bellezza I

Year
2020

Species
Human

View more WB references on thermofisher.com