

CD56 Monoclonal Antibody (123C3)

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	123C3
Conjugate	Unconjugated
Immunogen	Small cell lung carcinoma
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	PBS
Contains	0.09% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2537961

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	-
Immunohistochemistry (IHC)	-	3 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:200	4 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-dependent	-
Immunocytochemistry (ICC/IF)	1:200	-
Flow Cytometry (Flow)	1:25-1:50	-
ELISA (ELISA)	Assay-dependent	-
Miscellaneous PubMed (Misc)	-	3 Publications

Product Specific Information

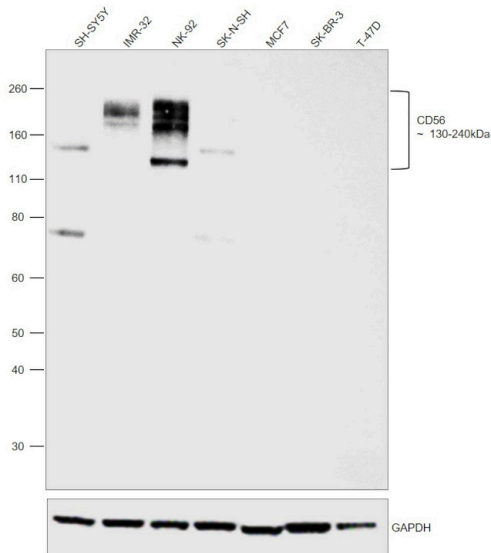
Heat-mediated antigen retrieval using a sodium citrate buffer (pH 6.0) is recommended for the staining of paraffin sections. For FACS analysis, use 10 µL of the suggested working dilution to label 1x10⁶ cells in 100 µL.

Mouse anti Human CD56 antibody, clone 123C3 recognizes human neural cell adhesion molecule (NCAM), otherwise known as CD56.

Product Images For CD56 Monoclonal Antibody (123C3)

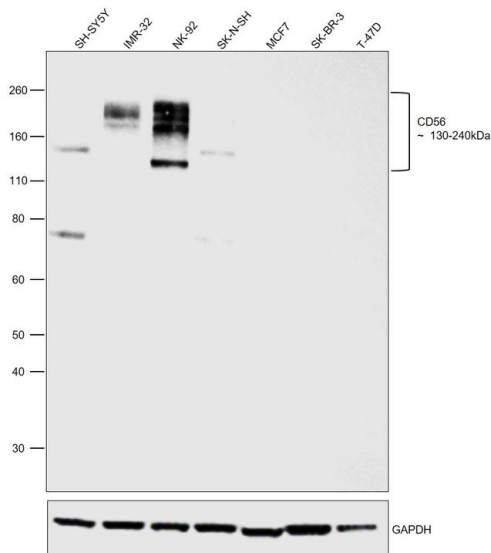
CD56 Antibody (MA5-16446)

Antibody specificity was demonstrated by detection of differential basal expression of the target across the cell lines tested owing to their inherent genetic constitution. Relative expression of Neural cell adhesion molecule 1 was observed between SH-SY5Y, IMR-32, NK-92, SK-N-SH and breast cancer cell lines such as MCF7, SK-BR-3 and T-47D (DOI: 10.1038/s41598-019-45377-8) using Anti-CD56 Monoclonal Antibody (123C3) (Product # MA5-16445, MA5-16446) in Western Blot. {RE}



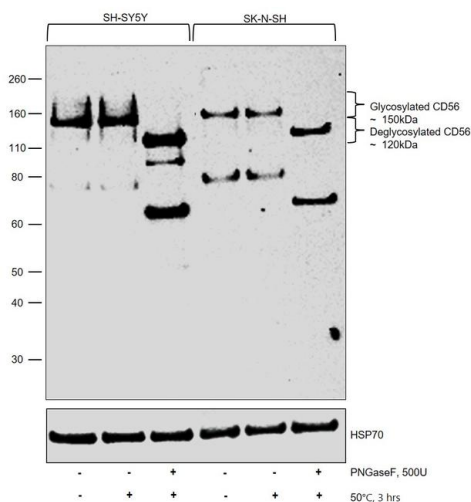
CD56 Antibody (MA5-16446) in WB

Western blot was performed using Anti-CD56 Monoclonal Antibody (123C3) (Product # MA5-16445, MA5-16446) and bands in the range of 130-240 kDa corresponding to Neural cell adhesion molecule 1 were observed. Membrane enriched extracts (30 µg lysate) of SH-SY5Y (Lane 1), IMR-32 (Lane 2), NK-92 (Lane 3), SK-N-SH (Lane 4), MCF7 (Lane 5), SK-BR-3 (Lane 6) and T-47D (Lane 7) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). 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) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:20,000 using the iBright™ FL1500 Imaging System (Product # A44115). Chemiluminescent detection was performed using SuperSignal™ West Dura Extended Duration Substrate (Product # 34076). Relative expression was observed between SH-SY5Y, IMR-32, NK-92, SK-N-SH and breast cancer cell lines such as MCF7, SK-BR-3 and T-47D as expected (DOI: 10.1038/s41598-019-45377-8).



CD56 Antibody (MA5-16446) in WB

Western blot was performed using Anti-CD56 Monoclonal Antibody (123C3) (Product # MA5-16446) and a 150 kDa band corresponding to CD56 was observed in SH-SY5Y and SK-N-SH. Membrane enriched cell extracts (12.5 µg lysate) of SH-SY5Y-Untreated (Lane 1), SH-SY5Y-Control (50°C, 3 hrs) (Lane 2), SH-SY5Y-Treated (500U PNGaseF; 50°C, 3 hr) (Lane 3), SK-N-SH-Untreated (Lane 4), SK-N-SH-Control (50°C, 3 hrs) (Lane 5) and SK-N-SH-Treated (500U PNGaseF; 50°C, 3 hr) (Lane 6) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0321BOX). Resolved proteins were transferred onto a Nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1,000 dilution) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:20,000 dilution) using the iBright FL1500 (Product # A44115). Chemiluminescent detection was performed using SuperSignal™ West Dura Extended Duration Substrate (Product # 34076). CD56 migrates at ~150 kDa due to multiple glycosylations (Lane 1 and Lane 4). To carry out deglycosylation of the protein, PNGase F Glycan Cleavage Kit was used (Product # A39245). Upon PNGaseF treatment, N-linked glycosylations are cleaved and deglycosylated CD56 can be seen at ~120 kDa (Lane 3 and Lane 6). This mass shift can be attributed to deglycosylation as the control sample



10 References

Immunohistochemistry (3)

Case reports in pathology	Year 2013
A Case of Distal Epithelioid Sarcoma of the Thumb Expressing Podoplanin, TLE1 and Ca 125.	Dilution 1:50
"MA5-16446 was used in immunohistochemistry to characterize the case of a distal epithelioid sarcoma arising in the thumb of a 14-year-old girl"	
Authors: Karagkounis G,Argyarakos T,Charkiolakis G,Castana O,Rontogianni D	

Annals of dermatology	Year 2011
Subcutaneous panniculitis-like T-cell lymphoma: a clinical and pathologic study of 14 korean patients.	
"MA5-16446 was used in immunohistochemistry to study subcutaneous panniculitis-like T-cell lymphomas in Korean patients"	
Authors: Lee DW,Yang JH,Lee SM,Won CH,Chang S,Lee MW,Choi JH,Moon KC	

View more IHC references on thermofisher.com

Immunohistochemistry (Paraffin) (4)

Endocrine journal	Year 2016
Usefulness of the octreotide test in Japanese patients for predicting the presence/absence of somatostatin receptor 2 expression in insulinomas.	Species Human
"MA516446 was used in immunohistochemistry - paraffin section to assess the relationship between the results of the octreotide test and somatostatin receptor 2 expression in insulinoma patients to predict insulinomas in Japanese patients"	
Authors: Nakamura A,Mitsuhashi T,Takano Y,Miyoshi H,Kameda H,Nomoto H,Nagai S,Hatanaka Y,Shimizu C,Terauchi Y,Atsumi T	

PloS one	Year 2016
Variable Expression of Neural Cell Adhesion Molecule Isoforms in Renal Tissue: Possible Role in Incipient Renal Fibrosis.	
"MA5-16446 was used in immunohistochemistry - paraffin section to learn the possible role of incipient renal fibrosis by variable expression of neural cell adhesion molecule isoforms in renal tissue"	
Authors: Markovi-Lipkovski J,Životi M,Müller CA,Tampe B,irovi S,Vještica J,Tomanovi N,Zeisberg M,Müller GA	

View more IHC (P) references on thermofisher.com

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Misc (3)

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