

B7-H3 Monoclonal Antibody (6A1)

Catalog NumberMA5-15693

Product data sheet

Details		Species Reactivity	
Size	100 µL	Species reactivity	Human
Host/Isotope	Mouse / IgG1	Published species	Not Applicable
Class	Monoclonal	Tested Applications	
Type	Antibody	ELISA (ELISA)	Dilution *1:10,000
Clone	6A1	Flow Cytometry (Flow)	1:200-1:400
Immunogen	Purified recombinant fragment of human CD276 (A.A. 30-130) expressed in E. Coli.	Immunohistochemistry (Paraffin) (IHC (P))	1:200-1:1,000
Conjugate	Unconjugated	Western Blot (WB)	1:500-1:2,000
Form	Liquid	Published Applications	
Concentration	Conc. Not Determined	Miscellaneous PubMed (Misc)	See 1 publications below
Storage buffer	ascites	* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.	
Contains	0.03% sodium azide		
Storage Conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.		

Product specific information

MA5-15693 targets CD276 in indirect ELISA, FACS, IHC, and WB applications and shows reactivity with Human samples. The MA5-15693 immunogen is purified recombinant fragment of human CD276 expressed in E. Coli. MA5-15693 detects CD276 which has a predicted molecular weight of approximately 57kDa.

Background/Target Information

CD276 is a member of the B7 family of co-stimulatory molecules also known as B7-H3. CD276 is a type I transmembrane protein that induces the proliferation of CD4+ and CD8+ T cells, enhances the generation of cytotoxic T cells and selectively stimulates the production of interferon gamma. Expression of CD276 can be induced on dendritic cells and monocytes by inflammatory cytokines, and is also widely expressed in peripheral tissues including the heart, kidney, testis and colon. In humans, CD276 exists as two isoforms which result from gene duplication and differential splicing. CD276 is reported to have therapeutic potential for the regulation of cell-mediated immune responses to cancer, particularly in conjunction with anti-angiogenic therapy.

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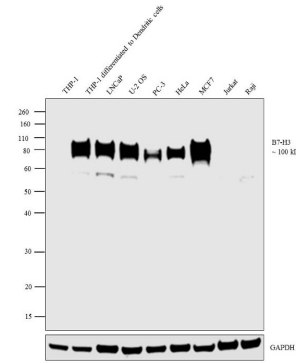
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Product Images For B7-H3 Monoclonal Antibody (6A1)

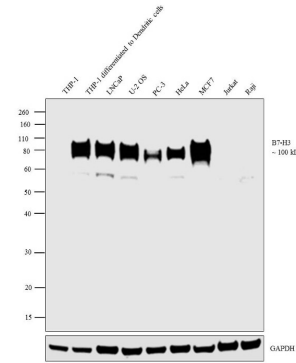
B7-H3 Antibody (MA5-15693) in WB

Western blot analysis was performed on whole cell extracts (30 µg lysate) of THP-1 (Lane 1), THP-1 differentiated to Dendritic cells (Lane 2), LNCaP (Lane 3), U-2 OS (Lane 4), PC-3 (Lane 5), HeLa (Lane 6), MCF7 (Lane 7), Jurkat (Lane 8) and Raji (Lane 9). The blot was probed with Anti-B7-H3 Monoclonal Antibody (6A1) (Product # MA5-15693, 1:500 dilution) and detected by chemiluminescence using Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate (Product # A28177, 0.25 µg/ml, 1:4000 dilution). A 100 kDa band corresponding to B7-H3 was detected in THP-1 differentiated to Dendritic cells, LNCaP, U-2 OS, PC-3, HeLa and MCF7 and not in Jurkat and Raji which are reported negative for B7-H3 expression.



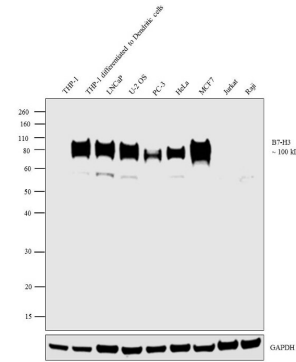
B7-H3 Antibody (MA5-15693)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models owing to their inherent genetic constitution. Expression of B7-H3 was not observed specifically in Jurkat and Raji using Anti-B7-H3 Monoclonal Antibody (6A1) (Product # MA5-15693) in Western Blot. {RE}



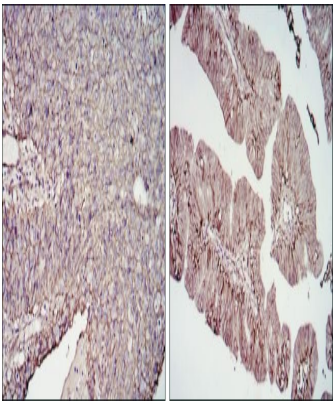
B7-H3 Antibody (MA5-15693)

Altered expression of proteins upon cell treatment demonstrates antibody specificity. Western blot using B7-H3 Monoclonal Antibody (Product # MA5-15693), shows increased expression of proteins in THP-1 cells differentiated to Dendritic cells. {TM}



B7-H3 Antibody (MA5-15693) in IHC (P)

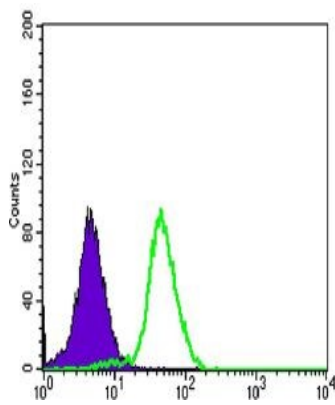
Immunohistochemical analysis of paraffin-embedded cervical cancer tissues (left) and ovarian cancer tissues (right) using CD276/B7H3 monoclonal antibody (Product # MA5-15693) followed with DAB staining.



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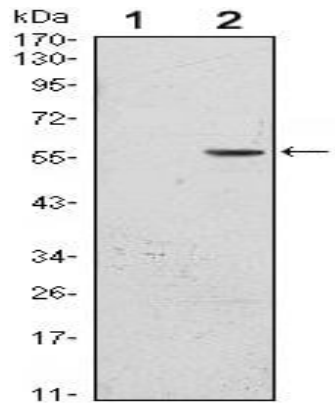
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### B7-H3 Antibody (MA5-15693) in Flow

Flow cytometric analysis of PC-3 cells using CD276/B7H3 monoclonal antibody (Product # MA5-15693) (green) and negative control (purple).



### B7-H3 Antibody (MA5-15693) in WB

Western blot analysis of CD276/B7H3 using CD276/B7H3 monoclonal antibody (Product # MA5-15693) in HEK293 (1) and CD276 (AA: 30-130) human IgG Fc transfected HEK293 (2) cell lysate.

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PubMed References For B7-H3 Monoclonal Antibody (6A1)

1 Miscellaneous PubMed References

Species / Dilution	Summary
Not Applicable / Not Cited	MA5-15693 was used to characterize the potent antitumor activity and binding to the FG loop of tumor antigen B7-H3 of humanized affinity-matured monoclonal antibody 8H9
	The Journal of biological chemistry ( 2015; 290: 30018)
	<b>"Humanized Affinity-matured Monoclonal Antibody 8H9 Has Potent Antitumor Activity and Binds to FG Loop of Tumor Antigen B7-H3."</b> Author(s):Ahmed M,Cheng M,Zhao Q,Goldgur Y,Cheal SM,Guo HF,Larson SM,Cheung NK PubMed Article URL: <a href="http://dx.doi.org/10.1074/jbc.M115.679852">http://dx.doi.org/10.1074/jbc.M115.679852</a>

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