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BCAT2

Purified Mouse Monoclonal Antibody
Catalog # AO2541a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	O15382
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	7G3A11
Isotype	Mouse IgG1
Calculated MW	44288
Immunogen	Purified recombinant fragment of human BCAT2 (AA: 259-393) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	587
Other Names	BCAM; BCT2; PP18; BCATM
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~N/A E~~ 1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BCAT2 is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BCAT2 {ECO:0000303|PubMed:31177572, ECO:0000312|HGNC:HGNC:977}
Function	Catalyzes the first reaction in the catabolism of the essential branched chain amino acids leucine, isoleucine, and valine (PubMed:17050531, PubMed:25653144, PubMed:8702755). Branched chain amino acid catabolism plays a role in adipocyte differentiation by providing lipogenic acetyl-CoA pools in differentiated adipocytes (By similarity). Mechanistically, acetyl-CoA derived from branched chain amino acid catabolism is used by EP300/p300 to acetylate and inhibit PRDM16, thereby preventing adipose tissue browning (By similarity). May also function as a transporter of branched chain alpha-keto acids (By similarity).

Cellular Location	Mitochondrion {ECO:0000250|UniProtKB:O35854}.
Tissue Location	Ubiquitous..

References

1.J Neurochem. 2012 Dec;123(6):997-1009.2.Biochemistry. 2009 Jan 27;48(3):645-56.

Images

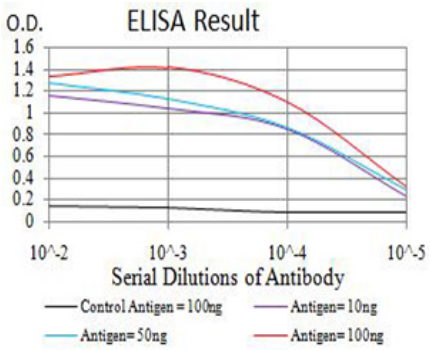


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

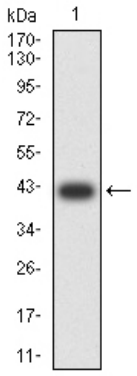


Figure 2:Western blot analysis using BCAT2 mAb against human BCAT2 (AA: 259-393) recombinant protein. (Expected MW is 41.5 kDa)

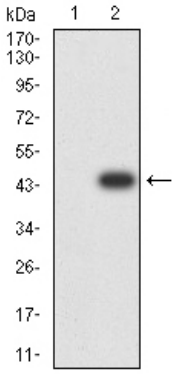
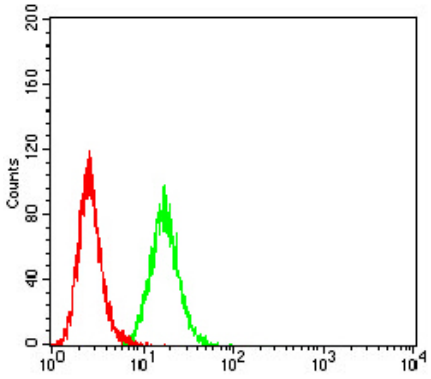


Figure 3:Western blot analysis using BCAT2 mAb against HEK293 (1) and BCAT2 (AA: 259-393)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 4:Flow cytometric analysis of HeLa cells using BCAT2 mouse mAb (green) and negative control (red).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.