

#### OriGene Technologies, Inc.

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## **Product datasheet for TA504360**

# **BCAT1 Mouse Monoclonal Antibody [Clone ID: OTI3F5]**

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3F5
Applications: IHC, WB

Recommend Dilution: WB 1:500~2000, IHC 1:150

Reactivity: Human, Mouse, Dog

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human BCAT1(NP\_005495) produced in HEK293T

cell.

**Formulation:** PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.78 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 42.8 kDa

**Gene Name:** branched chain amino acid transaminase 1

Database Link: NP 005495 Entrez Gene 12035 MouseEntrez Gene 486633 DogEntrez Gene 586 Human

**Background:** This gene encodes the cytosolic form of the enzyme branched-chain amino acid

transaminase. This enzyme catalyzes the reversible transamination of branched-chain alphaketo acids to branched-chain L-amino acids essential for cell growth. Two different clinical disorders have been attributed to a defect of branched-chain amino acid transamination: hypervalinemia and hyperleucine-isoleucinemia. As there is also a gene encoding a mitochondrial form of this enzyme, mutations in either gene may contribute to these

disorders. Alternatively spliced transcript variants have been described. [provided by RefSeq]

Synonyms: BCATC; BCT1; ECA39; MECA39; PNAS121; PP18

**Protein Families:** Druggable Genome

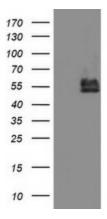
**Protein Pathways:** Metabolic pathways, Pantothenate and CoA biosynthesis, Valine, leucine and isoleucine

biosynthesis, Valine, leucine and isoleucine degradation

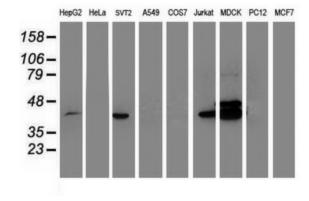




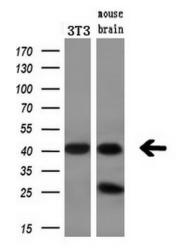
### **Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY BCAT1 ([RC219229], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-BCAT1. Positive lysates [LY401683] (100ug) and [LC401683] (20ug) can be purchased separately from OriGene.

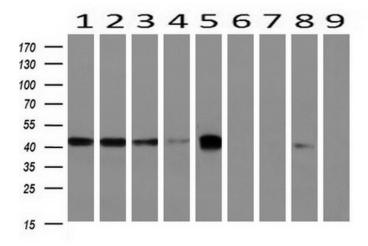


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-BCAT1 monoclonal antibody.

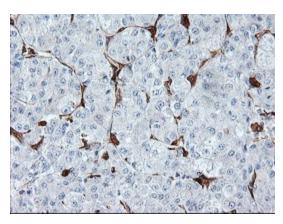


Western blot analysis of extracts (10ug) from a mouse cell line and a mouse tissue by using anti-BCAT1 monoclonal antibody (1:200).

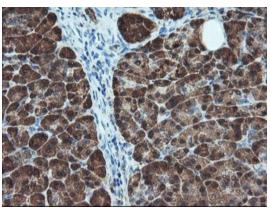




Western blot analysis of extracts (10ug) from 9 Human tissue by using anti-BCAT1 monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: Colon).

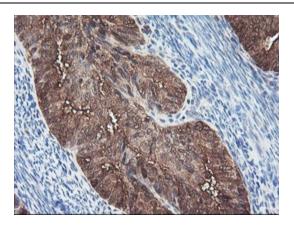


Immunohistochemical staining of paraffinembedded Carcinoma of Human liver tissue using anti-BCAT1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA504360)

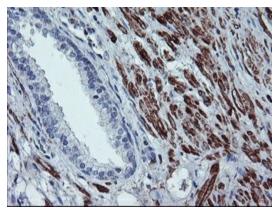


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-BCAT1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA504360)

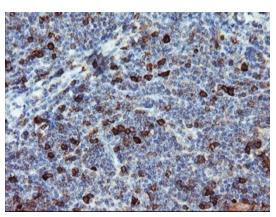




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-BCAT1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA504360)

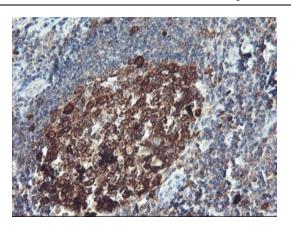


Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-BCAT1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA504360)



Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-BCAT1 mouse monoclonal antibody. (Heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA504360)





Immunohistochemical staining of paraffinembedded Human tonsil within the normal limits using anti-BCAT1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA504360)