

## Product datasheet for **CF504360**

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

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OTI3F5
<b>Applications:</b>	IHC, WB
<b>Recommended Dilution:</b>	WB 1:500~2000, IHC 1:150
<b>Reactivity:</b>	Human, Dog, Mouse
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG2a
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Full length human recombinant protein of human BCAT1(NP_005495) produced in HEK293T cell.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	42.8 kDa
<b>Gene Name:</b>	branched chain amino acid transaminase 1
<b>Database Link:</b>	<a href="#">NP_005495</a> <a href="#">Entrez Gene 12035 Mouse</a> <a href="#">Entrez Gene 486633 Dog</a> <a href="#">Entrez Gene 586 Human</a> <a href="#">P54687</a>



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**Background:**

This gene encodes the cytosolic form of the enzyme branched-chain amino acid transaminase. This enzyme catalyzes the reversible transamination of branched-chain alpha-keto 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:**

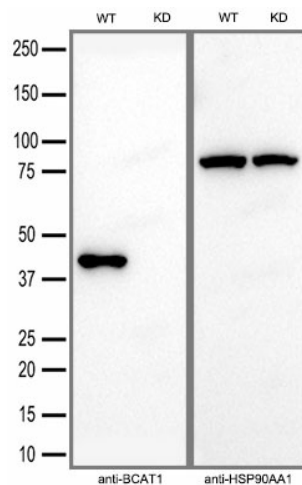
BCATC; BCT1; ECA39; MECA39; PNAS121; PP18

**Protein Families:**

Druggable Genome

**Protein Pathways:**

Metabolic pathways, Pantothenate and CoA biosynthesis, Valine, leucine and isoleucine biosynthesis, Valine, leucine and isoleucine degradation

**Product images:**


Equivalent amounts of cell lysates (30 ug per lane) of wild-type HeLa cells (WT) and BCAT1-Knockdown HeLa cells (KD) were separated by SDS-PAGE and immunoblotted with anti-BCAT1 monoclonal antibody [TA504360] (1:5000). Then the blotted membrane was stripped and reprobed with anti-HSP90AA1 antibody as a loading control.

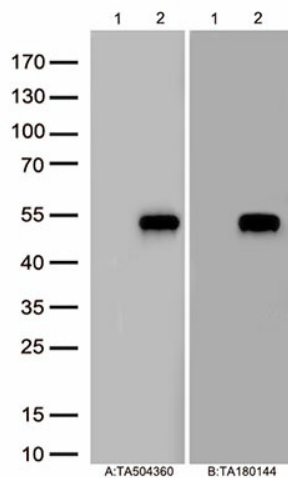
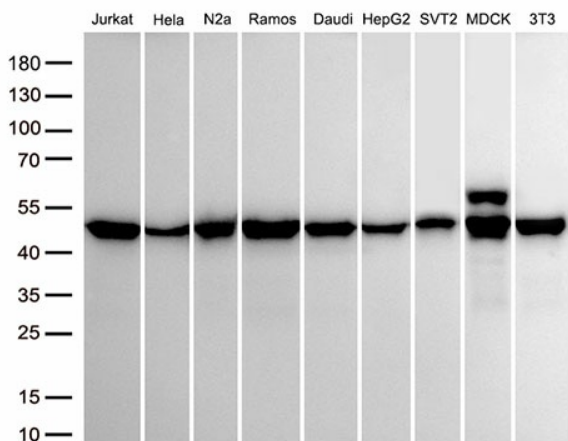
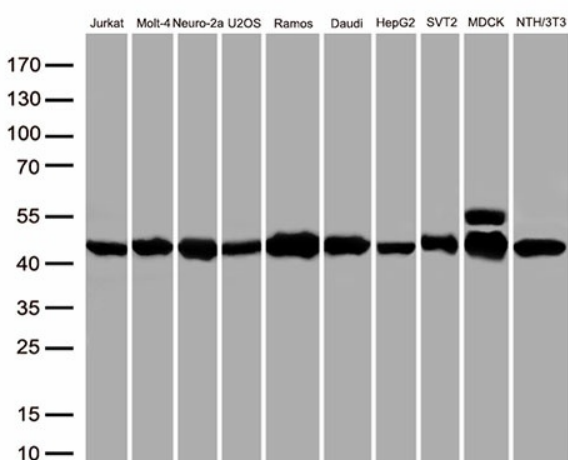


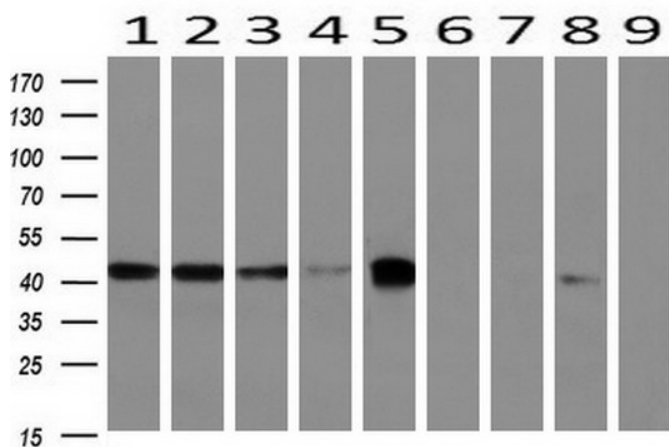
Figure A, Western blot analysis of overexpressed lysates(25ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], lane 1) , human BCAT1 plasmid ([RC219229], lane 2) using anti-BCAT1 antibody [TA504360] (1:500). Figure B, Western blot analysis of the same samples as figure A with anti-DDK antibody ([TA180144], 1:1000)



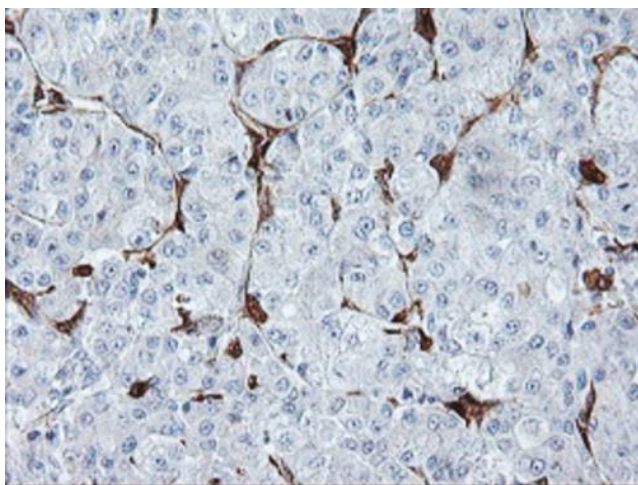
Western blot analysis of extracts (50ug per lane) from 9 cell lines lysates by using anti-BCAT1 antibody. ([TA504360], 1:500).



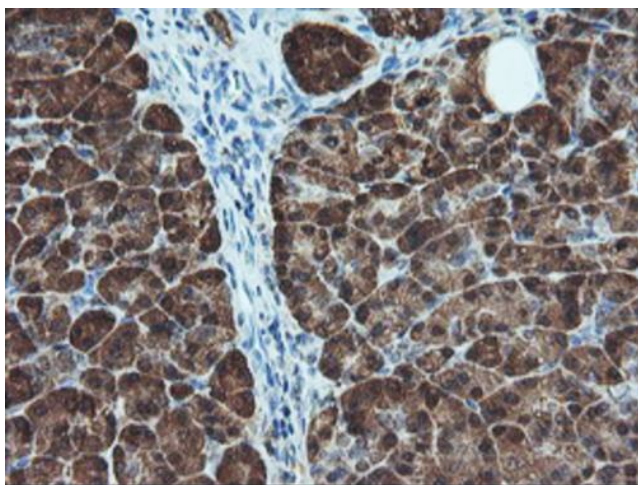
Western blot analysis of extracts (50ug per lane) from 10 cell lines lysates by using anti-BCAT1 monoclonal antibody([TA504360], 1:500)



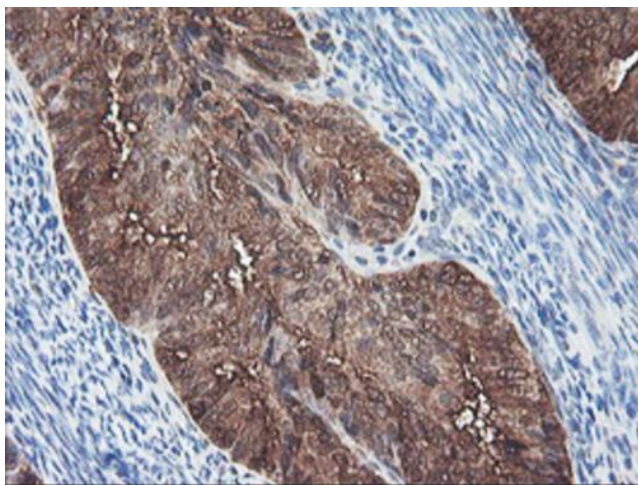
Western blot analysis of extracts (10ug) from 9 Human tissue by using anti-BCAT1 monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: Colon).



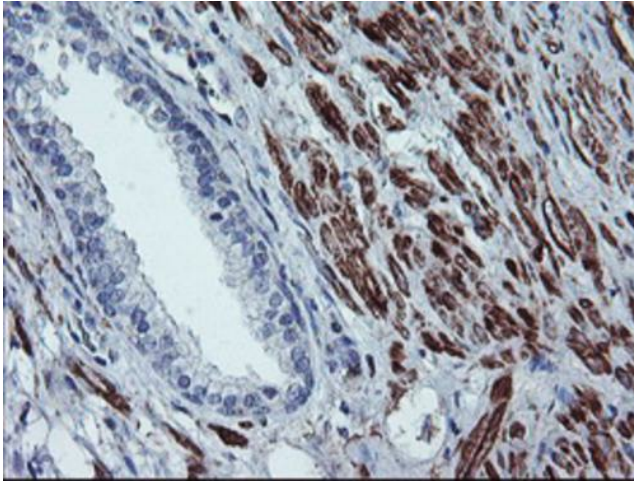
Immunohistochemical staining of paraffin-embedded Carcinoma of Human liver tissue using anti-BCAT1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



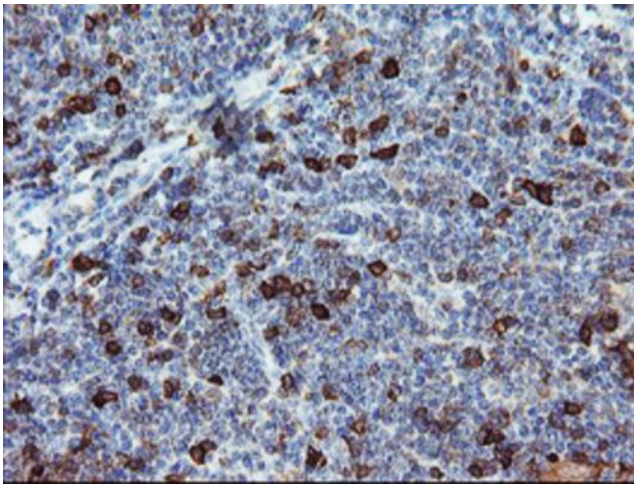
Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-BCAT1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



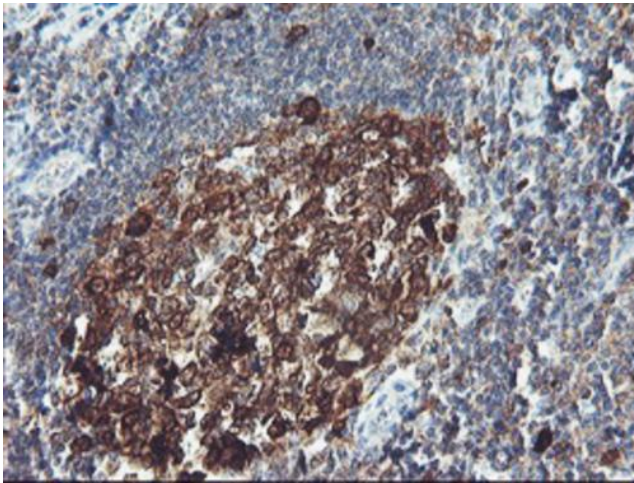
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-BCAT1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-BCAT1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human lymphoma tissue using anti-BCAT1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-BCAT1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.