

Store at
-20C
#12822**BCAT1 Antibody**

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For Research Use Only. Not for Use in Diagnostic Procedures.

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---------------|-------------|--------------|-----------|-----------------|-------------|-----------------|
| W | H Mk | Endogenous | 43 | Rabbit | #P54687 | 586 |

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

BCAT1 Antibody recognizes endogenous levels of total BCAT1 protein. This antibody cross-reacts with BCAT2.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human BCAT1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

BCAT1 and BCAT2 are cytosolic and mitochondrial branched chain aminotransferases, respectively (1,2). Research studies have implicated BCAT1 in distant metastasis in patients with advanced colorectal cancer (3). Disruption of BCAT2 in mice leads to higher levels of plasma branched-chain amino acids, reduced adiposity and body weight, and increased energy expenditure, suggesting its role in regulating insulin sensitivity (4).

Background References

1. Bledsoe, R.K. et al. (1997) *Biochim Biophys Acta* 1339, 9-13.
2. Suryawan, A. et al. (1998) *Am J Clin Nutr* 68, 72-81.
3. Yoshikawa, R. et al. (2006) *World J Gastroenterol* 12, 5884-9.
4. She, P. et al. (2007) *Cell Metab* 6, 181-94.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **Mk:** Monkey

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