

## Product datasheet for **TA392719S**

### **BCKDH kinase (BCKDK) Rabbit Polyclonal Antibody**

#### **Product data:**

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:500~1:1000 IHC: 1:50~1:200 IP 1:50 - 1:100
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 21-70 of Human BCKDK.
Specificity:	BCKDK (E41) polyclonal antibody detects endogenous levels of BCKDK protein.
Formulation:	Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2
Concentration:	1mg/ml
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Stability:	1 year
Predicted Protein Size:	~ 46 kDa
Gene Name:	branched chain ketoacid dehydrogenase kinase
Database Link:	<a href="#">Entrez Gene 10295 Human O14874</a>

**Background:** BCKDK (branched chain ketoacid dehydrogenase kinase), also known as BCKDHKIN, is a 412 amino acid mitochondrial matrix protein that exists as a monomer and contains one histidine kinase domain. Expressed ubiquitously, BCKDK catalyzes the ATP-dependent phosphorylation and subsequent inactivation of the branched-chain  $\alpha$ -ketoacid dehydrogenase (BCKD) complex, a regulatory enzyme complex that plays a crucial role in the catabolic pathways of valine, leucine and isoleucine. Specifically, the BCKD complex functions as the second enzyme in branched-chain amino acid (BCAA) catabolism, effectively catalyzing the irreversible oxidative decarboxylation of BCAAs. Due to the ability of BCKDK to regulate the activity of the BCKD complex, BCKDK plays an essential role in the catabolic pathways of branched-chain amino acid metabolism.

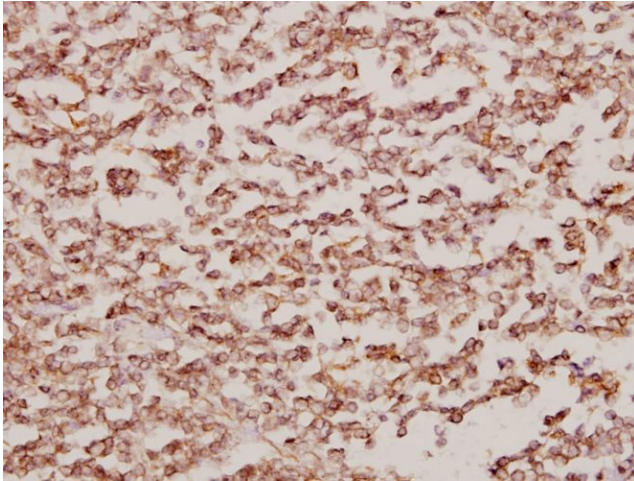


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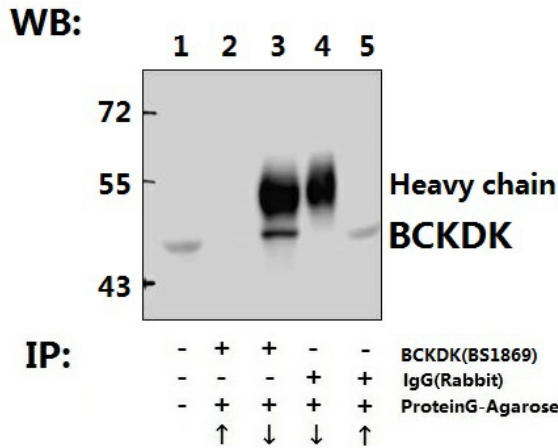
**Synonyms:** BCKD-kinase; BCKDHKIN; Bckdk; BCKD kinase; Branched-chain alpha-ketoacid dehydrogenase kinase; Branched chain alpha keto acid dehydrogenase kinase; Branched chain ketoacid dehydrogenase kinase; mitochondrial

**Note:** For research use only, not for use in diagnostic procedure.

**Product images:**



Immunohistochemistry (IHC) analyzes of BCKDK (E41) pAb in paraffin-embedded human tonsil carcinoma tissue at 1:50.



Immunoprecipitation of HEK293T cell lysate using BCKDK (E41) pAb (Sepharose Bead Conjugate) #BD0048(lane 2 and lane 3) and Nonspecific IgG Control (Sepharose Bead Conjugate) #BD0048 (lane 4 and lane 5) .Lane 1 is 30% input. The western blot was probed using BCKDK (E41) # [TA392719]. "↑"supernatant; "↓"(deposition)