For Research Use Only

## BCKDHA Recombinant antibody, PBS Only (Capture)

Catalog Number:85799-3-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

250051G11

**Basic Information** 

Catalog Number: GenBank Accession Number:

85799-3-PBS BC008933

Size: Genel D (NCBI): 100ug , Concentration: 1 mg/ml by 593

Nanodrop; UNIPROT ID:
Source: P12694
Rabbit Full Name:

Isotype: branched chain keto acid

IgG dehydrogenase E1, alpha polypeptide

Immunogen Catalog Number: Calculated MW: AG32613 50 kDa

Observed MW: 42-50 kDa

**Applications** 

**Tested Applications:** 

WB, Cytometric bead array, Indirect ELISA

Species Specificity: human, mouse, rat

## **Product Information**

85799-3-PBS targets BCKDHA as part of a matched antibody pair:

MP02125-1: 85799-3-PBS capture and 85799-2-PBS detection (validated in Cytometric bead array)

MP02125-2: 85799-3-PBS capture and 85799-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## **Background Information**

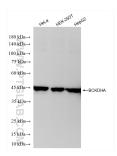
branched chain keto acid dehydrogenase E1, alpha polypeptide (BCKDHA), the gene encoding the regulated subunit of BCKDC was only one of two primary susceptibility genes identified that affected the risk of both type 2 diabetes mellitus (T2DM) and obesity (PMID: 25287287). BIX01294 transcriptionally downregulated the transcription of BCKDHA, which is essential for fueling the tricarboxylic acid (TCA) cycle. Studies have shown that KDM3A, a Jumonji histone demethylase, epigenetically regulates BCKDHA expression by binding to the BCKDHA gene promoter (PMID: 34876693). Moreover, at least four genes including BCKDHA, branched chain keto acid dehydrogenase E1, beta polypeptide (BCKDHB), dihydrolipoamide dehydrogenase (DLD), and dihydrolipoamide branched chain transacylase E2 (DBT) have been reported to be the causative gene for Maple syrup urine disease (MSUD) (PMID: 34187135).

Storage

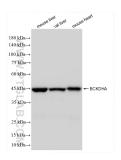
Storage: Store at -80°C. Storage Buffer:

PBS only, pH7.3

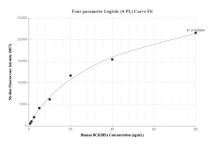
## **Selected Validation Data**



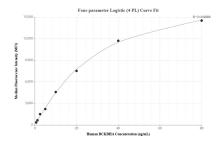
Various lysates were subjected to SDS PAGE followed by western blot with 85799-3-RR (BCKDHA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85799-3-PBS in a different storage buffer formulation.



Various lysates were subjected to SDS PAGE followed by western blot with 85799-3-RR (BCKDHA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85799-3-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP02125-1, BCKDHA Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85799-3-PBS. Detection antibody: 85799-2-PBS. Standard: Ag32613. Range: 0.625-80 ng/mL



Cytometric bead array standard curve of MP02125-2, BCKDHA Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85799-3-PBS. Detection antibody: 85799-1-PBS. Standard: Ag32613. Range: 0.625-80 ng/mL