For Research Use Only

DUSP9 Recombinant antibody

Catalog Number:86199-3-RR

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Basic Information

Catalog Number:
86199-3-RR

Size:
100ul , Concentration: 1000 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG25167

GenBank Accession Number:
BC060837

GeneID (NCBI):
1852

UNIPROT ID:
Q99956

Full Name:
dual specificity phosphatase 9

Calculated MW:
42 kDa

Observed MW:
42 kDa

Purification Method:
Protein A purification

CloneNo.:
250824B11

Recommended Dilutions:
WB: 1:5000-1:50000

Applications

Tested Applications:
WB, ELISA

Species Specificity:
human

Positive Controls:

WB : HEK-293 cells, HuH-7 cells, HepG2 cells

Background Information

Dual specificity protein phosphatase 9 (DUSP9) is also named itogen-activated protein kinase phosphatase 4 (MAP kinase phosphatase 4; MKP-4). DUSP9 is a typical DUSP characterized by the presence of an MKB/KIM motif and a phosphatase domain, which shares structural homology with other DUSPs (PMID: 25519881). DUSP9 is an important downstream regulator of BMP/Smad signaling and a key factor in maintaining the stemness of mESCs (PMID: 34768967). DUSP9 is one of the key genes involved in gonadotrophin-mediated ovarian follicle development (PMID: 33676987). DUSP9 expression increases during insulin-induced adipogenesis and culminates in mature adipocytes. DUSP9 as a key regulator of insulin signaling and highlighted its potential role in insulin resistance and metabolic diseases by dephosphorylating kinases involved in metabolic processes, glucose uptake and storage. DUSP9 can also impair the action of extracellular mediators and stress inducers (i.e., proinflammatory cytokines), which can induce insulin resistance by abnormally activating MAPK or SAP pathways (PMID: 30063256, PMID: 18296638). In normal mature tissues, DUSP9 is mainly expressed in kidney, adipose tissue and placenta, while it is only minimally present in brain, ovary, testis and urinary bladder (PMID: 34768967).

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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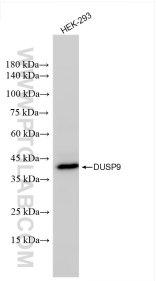
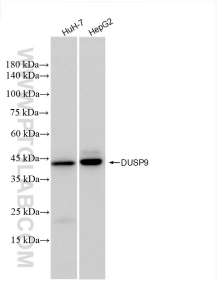
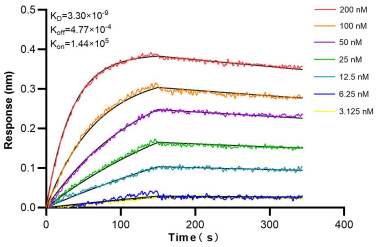
Selected Validation Data



HEK-293 cells were subjected to SDS PAGE followed by western blot with 86199-3-RR (DUSP9 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 86199-3-RR (DUSP9 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 86199-3-RR against Human DUSP9 were performed. The affinity constant is 3.30 nM.