

For Research Use Only

CYBRD1 Recombinant monoclonal antibody

Catalog Number:86245-1-RR



Basic Information

Catalog Number: 86245-1-RR	GenBank Accession Number: BC065290	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 79901	CloneNo.: 250771A6
Source: Rabbit	UNIPROT ID: Q53TN4	Recommended Dilutions: WB: 1:500-1:2000
Isotype: IgG	Full Name: cytochrome b reductase 1	
Immunogen Catalog Number: AG24968	Observed MW: 25-31 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB : T-47D cells, mouse colon tissue, rat colon tissue, COLO 320 cells, SW480 cells, HCT 116 cells, NCI-H1299 cells
Species Specificity: human, mouse, rat	

Background Information

CYBRD1, also known as Cytochrome b Reductase 1, is a gene encoding a key enzyme involved in iron metabolism. It functions primarily in duodenal enterocytes, where it reduces dietary ferric iron (Fe^{3+}) to the more soluble ferrous form (Fe^{2+}) at the brush border membrane. This reduction step is crucial for the subsequent uptake of iron into the body via the divalent metal transporter 1 (DMT1). CYBRD1's activity is therefore essential for maintaining systemic iron homeostasis, and its expression is regulated by body iron stores and hypoxia. Dysregulation of this gene has been implicated in disorders of iron overload, such as hereditary hemochromatosis, highlighting its significant role in human iron physiology.

Storage

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

*** 20ul sizes contain 0.1% BSA

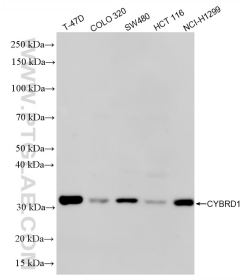
For technical support and original validation data for this product please contact:

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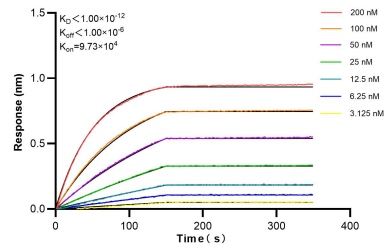
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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 86245-1-RR (CYBRD1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 86245-1-RR against Human CYBRD1 were performed. The affinity constant is below 1 pM.