Recombinant DGRmAb®

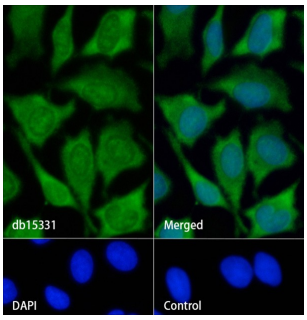
Aconitase 1 (DGR14355) Rabbit mAb (PBS Only)

db15331-PBS **Package : 10μg 100μg**

Product Name : Aconitase 1 (DGR14355) Rabbit mAb (PBS Only)
Cat.No.: db15331-PBS
Synonyms : IRP1; ACONS; HEL60; IREB1; IREBP; IREBP1
Application : WB, ICC/IF, FC
Reactivity : Human,Mouse,Rat
Host species : Rabbit

Background	The protein encoded by this gene is a bifunctional, cytosolic protein that functions as an essential enzyme in the TCA cycle and interacts with mRNA to control the levels of iron inside cells. When cellular iron levels are high, this protein binds to a 4Fe-4S cluster and functions as an aconitase. Aconitases are iron-sulfur proteins that function to catalyze the conversion of citrate to isocitrate. When cellular iron levels are low, the protein binds to iron-responsive elements (IREs), which are stem-loop structures found in the 5' UTR of ferritin mRNA, and in the 3' UTR of transferrin receptor mRNA. When the protein binds to IRE, it results in repression of translation of ferritin mRNA, and inhibition of degradation of the otherwise rapidly degraded transferrin receptor mRNA. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Alternative splicing results in multiple transcript variants [provided by RefSeq, Jan 2014]
Immunogen	A synthetic peptide of human Aconitase 1
Gene ID	48
Swiss Prot	P21399
Synonyms	IRP1; ACONS; HEL60; IREB1; IREBP; IREBP1
Reactivity	Human,Mouse,Rat
Application	WB, ICC/IF, FC
Calculated MW	98 kDa
Observed MW	98 kDa
Host species	Rabbit
Clonality	Monoclonal
Clonality No.	DGR14355

Isotype	IgG
Purity	Affinity Purification
Conjugation	Un-conjugated
Concentration	1 mg/mL
Formulation	PBS Only
Storage Stability	Store at -20°C. Recommended to aliquot into single-use vials. Supplied in 1X PBS (pH 7.4). BSA and Azide Free. Stable for 12 months from date of receipt.



Immunofluorescence analysis of HeLa cells labelling Aconitase 1 with db15331.

The cells were fixed with cold 100% methanol (10min, 4℃) and blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween 20 for 1h. The cells were then incubate with db15331 (1:100) at room temprature for 1h, followed by a further incubation at room temperature for 45min with Goat Anti Rabbit IgG (H+L)-AF488 (db10005, shown in green). Nuclear DNA was labeled in blue with DAPI.

Control: Secondary antibody only.