Recombinant DGRmAb®

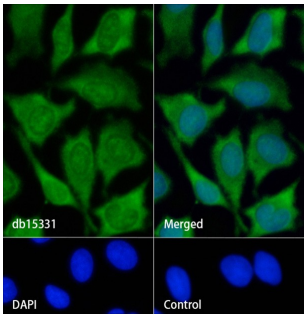
Aconitase 1 (DGR14355) Rabbit mAb

db15331 **Package : 10μL 20μL 50μL 100μL**

Product Name : Aconitase 1 (DGR14355) Rabbit mAb
Cat.No.: db15331
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
Recommended dilution	WB: 1:1000 ICC/IF: 1:100-1:200 FC: 1:100
Calculated MW	98 kDa
Observed MW	98 kDa
Host species	Rabbit

Clonality	Monoclonal
Clonality No.	DGR14355
Isotype	IgG
Purity	Affinity Purification
Conjugation	Un-conjugated
Storage Stability	Store at -20°C. Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. 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.