

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.