

Aconitase 1 Recombinant Rabbit mAb

Catalog: BS48079

Host: Rabbit

Reactivity: Human, Mouse, Rat

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]

Product:

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.

Molecular Weight:

98 kDa Swiss-Prot:

P21399

Purification&Purity:

Affinity Purification

Applications:

WB: 1:1000
ICC/IF: 1:20-1:50
FC: 1:20

Storage&Stability:

Store at $4 \,^{\circ}{\rm C}$ short term. Aliquot and store at $-20 \,^{\circ}{\rm C}$ long term. Avoid freeze-thaw cycles.

Isotype:

IgG

DATA:

Note:

For research use only, not for use in diagnostic procedure.