

## anti- Aconitase 1 antibody

### Product Information

|               |   |
|---------------|---|
| Catalog No.:  | FNab00087   |
| Size:         | 100µg   |
| Form:         | liquid  |
| Purification: | Immunogen affinity purified   |
| Purity:       | ≥95% as determined by SDS-PAGE  |
| Host:         | Rabbit  |
| Clonality:    | polyclonal  |
| Clone ID:     | None  |
| IsoType:      | IgG   |
| Storage:      | PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months (Avoid repeated freeze / thaw cycles.) |

### 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

### Immunogen information

|              |   |
|--------------|---|
| Immunogen:   | aconitase 1, soluble  |
| Synonyms:    | ACO1, Aconitase, Aconitase 1, aconitase 1, soluble, ACONS, Citrate hydro lyase, Ferritin repressor protein, IRE BP 1, IREB1, IREBP, IREBP1, Iron regulatory protein 1, IRP1 |
| Observed MW: | 120 kDa   |

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### Wuhan Fine Biotech Co., Ltd.

B9 Bld, High-Tech Medical Devices Park, No. 818 Gaoxin Ave. East Lake High-Tech Development Zone. Wuhan, Hubei, China(430206)

Tel : (0086)027-87384275

Fax: (0086)027-87800889

[www.fn-test.com](http://www.fn-test.com)

Uniprot ID : P21399

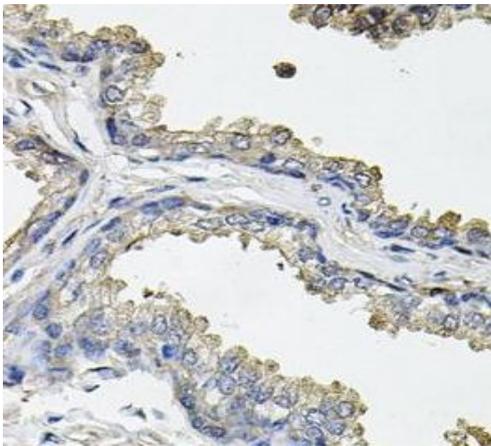
### Application

Reactivity: Human, Mouse, Rat

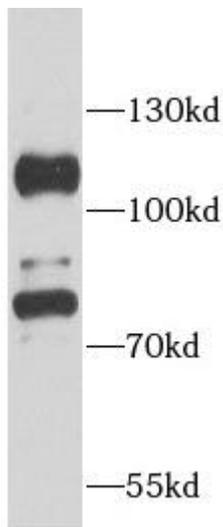
Tested Application: ELISA, WB, IHC

Recommended dilution: WB: 1:500 - 1:2000; IHC: 1:50 - 1:100

Image:



Immunohistochemistry of paraffin-embedded mouse brain tissue slide using FNab00087(ACO1 antibody) at dilution of 1:100



HeLa cells were subjected to SDS PAGE followed by western blot with FNab00087(ACO1 antibody) at dilution of 1:1000

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