

## Product datasheet for **TA321448**

### Aconitase 1 (ACO1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	IHC: 50-200 Positive control: Human liver cancer Predicted cell location: Cytoplasm
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to a region derived from 132-146 amino acids of human aconitase 1, soluble
Formulation:	PBS pH7.3, 0.05% NaN <sub>3</sub> , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	aconitase 1
Database Link:	<a href="#">NP_002188</a> <a href="#">Entrez Gene 11428 MouseEntrez Gene 50655 RatEntrez Gene 48 Human P21399</a>
Background:	Aconitase 1; also known as iron regulatory element binding protein 1 (IREB1); is a cytosolic protein which binds to iron-responsive elements (IREs). IREs are stem-loop structures found in the 5' UTR of ferritin mRNA; and in the 3' UTR of transferrin receptor mRNA. The iron-induced binding to the IRE results in repression of translation of ferritin mRNA; and inhibition of degradation of the otherwise rapidly degrading transferrin receptor mRNA. Thus; IREB1 plays a central role in cellular iron homeostasis. It was also shown to have aconitase activity; and hence grouped with the aconitase family of enzymes.



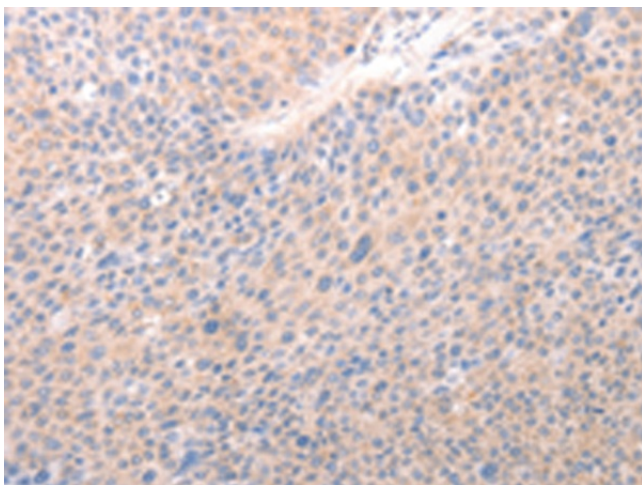
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**Synonyms:** ACONS; HEL60; IREB1; IREBP; IREBP1; IRP1

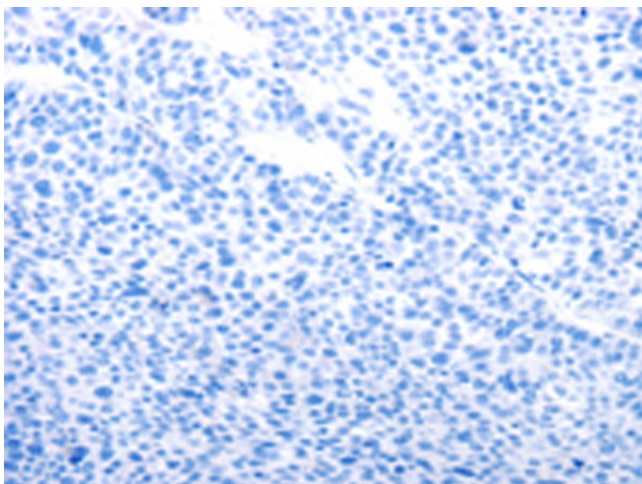
**Protein Families:** Druggable Genome

**Protein Pathways:** Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism, Metabolic pathways

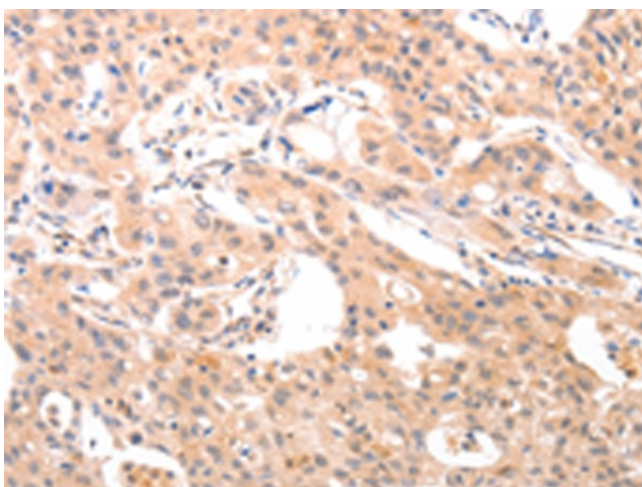
**Product images:**



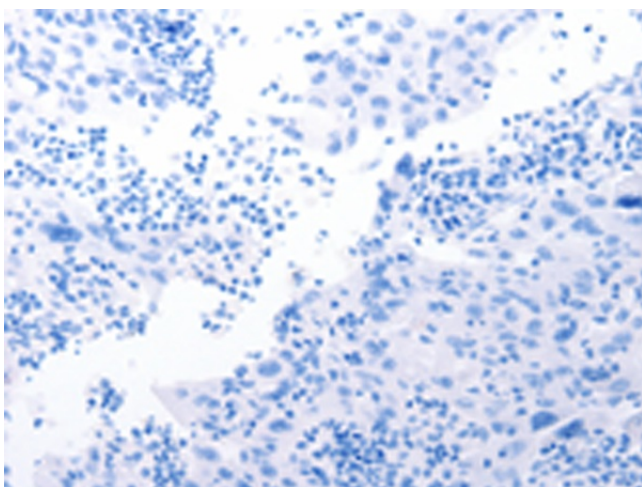
Immunohistochemistry of paraffin-embedded Human liver cancer tissue using TA321448 (ACO1 Antibody) at dilution 1/50 (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using TA321448 (ACO1 Antibody) at dilution 1/50, treated with synthetic peptide. (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human lung cancer tissue using TA321448 (ACO1 Antibody) at dilution 1/50 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human lung cancer tissue using TA321448 (ACO1 Antibody) at dilution 1/50, treated with synthetic peptide. (Original magnification: ×200)