

Product datasheet for **TA503189S**

Aminoacylase 1 (ACY1) Mouse Monoclonal Antibody [Clone ID: OTI1D4]

Product data:

| | |
|-------------------------|---|
| Product Type: | Primary Antibodies |
| Clone Name: | OTI1D4 |
| Applications: | FC, IHC, WB |
| Recommended Dilution: | WB 1:500~2000, IHC 1:150, FLOW 1:100 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Mouse |
| Isotype: | IgG1 |
| Clonality: | Monoclonal |
| Immunogen: | Full length human recombinant protein of human ACY1(NP_000657) produced in HEK293 cell. |
| Formulation: | PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide. |
| Concentration: | 0.3 mg/ml |
| Purification: | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G) |
| Conjugation: | Unconjugated |
| Storage: | Store at -20°C as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Predicted Protein Size: | 45.7 kDa |
| Gene Name: | aminoacylase 1 |
| Database Link: | NP_000657 Entrez Gene 109652 Mouse Entrez Gene 300981 Rat Entrez Gene 95 Human Q03154 |



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Background:

This gene encodes a cytosolic, homodimeric, zinc-binding enzyme that catalyzes the hydrolysis of acylated L-amino acids to L-amino acids and an acyl group, and has been postulated to function in the catabolism and salvage of acylated amino acids. This gene is located on chromosome 3p21.1, a region reduced to homozygosity in small-cell lung cancer (SCLC), and its expression has been reported to be reduced or undetectable in SCLC cell lines and tumors. The amino acid sequence of human aminoacylase-1 is highly homologous to the porcine counterpart, and this enzyme is the first member of a new family of zinc-binding enzymes. Mutations in this gene cause aminoacylase-1 deficiency, a metabolic disorder characterized by central nervous system defects and increased urinary excretion of N-acetylated amino acids. Alternative splicing of this gene results in multiple transcript variants. Read-through transcription also exists between this gene and the upstream ABHD14A (abhydrolase domain containing 14A) gene, as represented in GenelD:100526760. A related pseudogene has been identified on chromosome 18. [provided by RefSeq]

Synonyms:

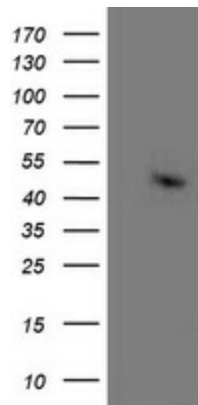
ACY-1; ACY1D; HEL-S-5

Protein Families:

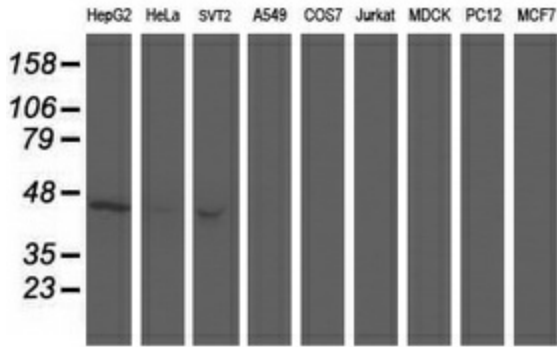
Protease

Protein Pathways:

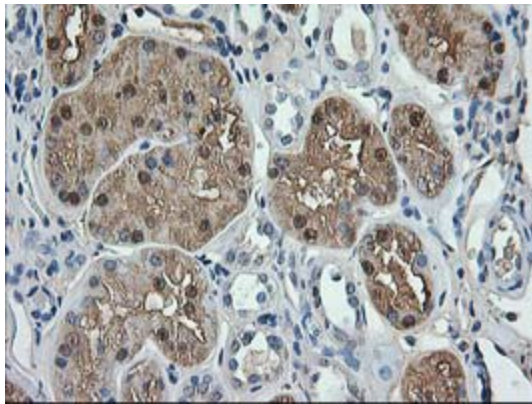
Arginine and proline metabolism, Metabolic pathways

Product images:

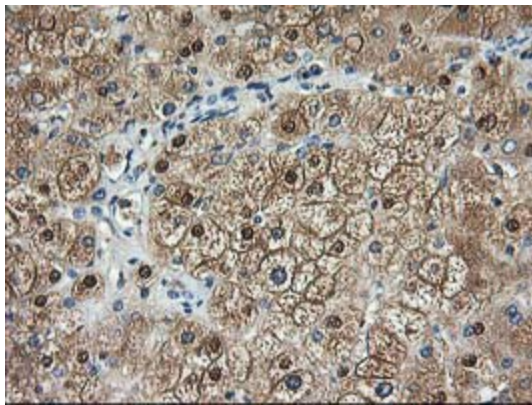
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ACY1 ([RC201284], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACY1. Positive lysates [LY424578] (100ug) and [LC424578] (20ug) can be purchased separately from OriGene.



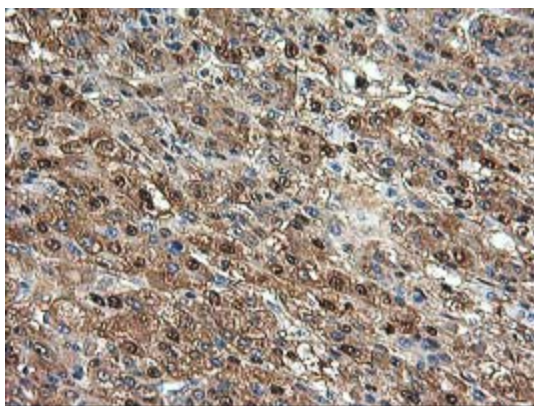
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ACY1 monoclonal antibody.



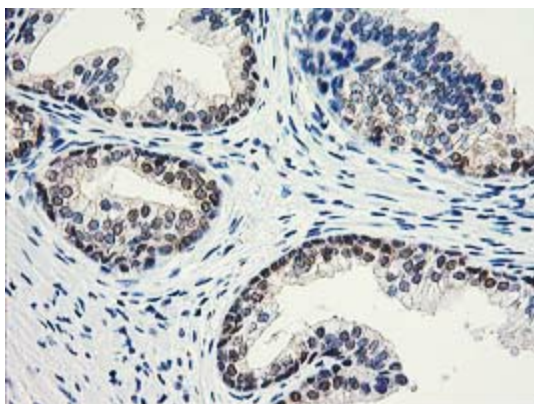
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-ACY1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503189])



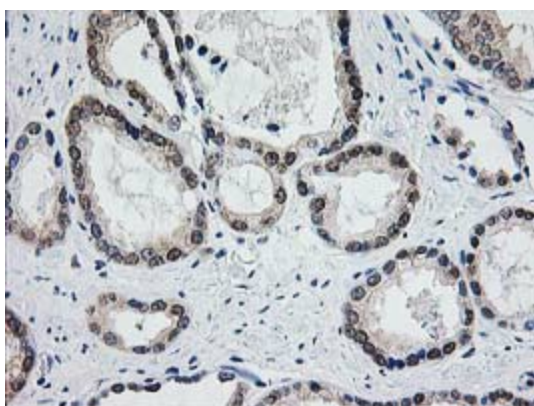
Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-ACY1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503189])



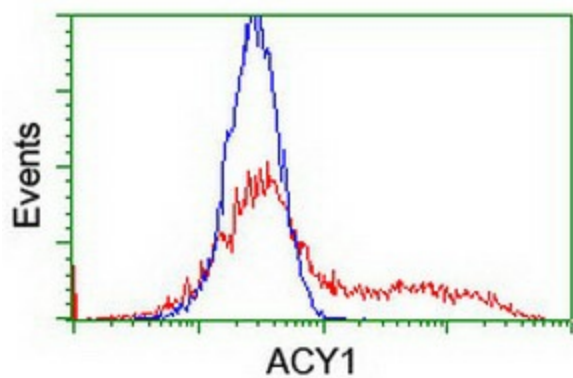
Immunohistochemical staining of paraffin-embedded Carcinoma of Human liver tissue using anti-ACY1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503189])



Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-ACY1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503189])



Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-ACY1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503189])



HEK293T cells transfected with either [RC201284] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-ACY1 antibody ([TA503189]), and then analyzed by flow cytometry.