

## Product datasheet for **TA323594**

### Aminoacylase 1 (ACY1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 200-1000 WB positive control: Mouse kidney and human normal kidney tissue, K562 cells IHC: 25-100 Positive control: Human gastric cancer Predicted cell location: Cytoplasm and Nucleus
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Fusion protein corresponding to C terminal 250 amino acids of human aminoacylase 1
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.
Predicted Protein Size:	46 kDa
Gene Name:	aminoacylase 1
Database Link:	<a href="#">NP_000657</a> <a href="#">Entrez Gene 109652 Mouse</a> <a href="#">Entrez Gene 95 Human</a> <a href="#">Q03154</a>



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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.

**Synonyms:**

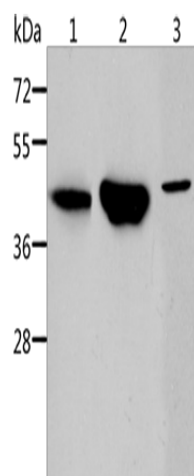
ACY-1; ACY1D; HEL-S-5

**Protein Families:**

Protease

**Protein Pathways:**

Arginine and proline metabolism, Metabolic pathways

**Product images:**

Gel: 10%SDS-PAGE

Lysate: 40 µg

Lane 1-3: Mouse kidney tissue

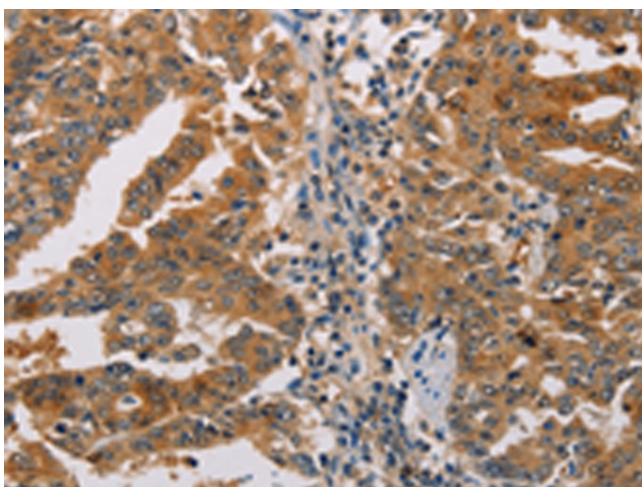
human normal kidney tissue

K562 cells

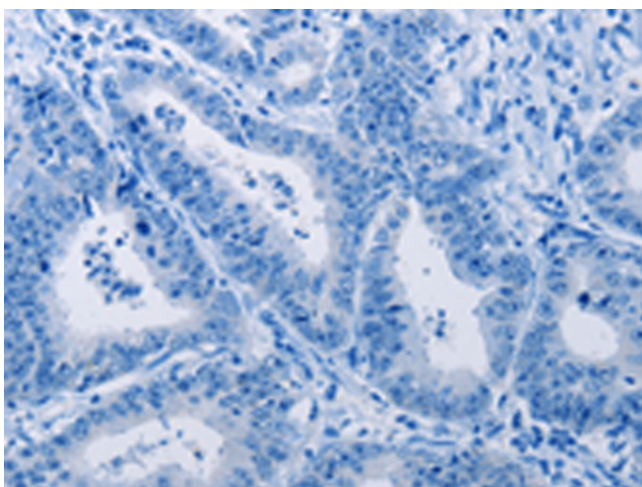
Primary antibody: TA323594 (ACY1 Antibody) at dilution 1/250

Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution

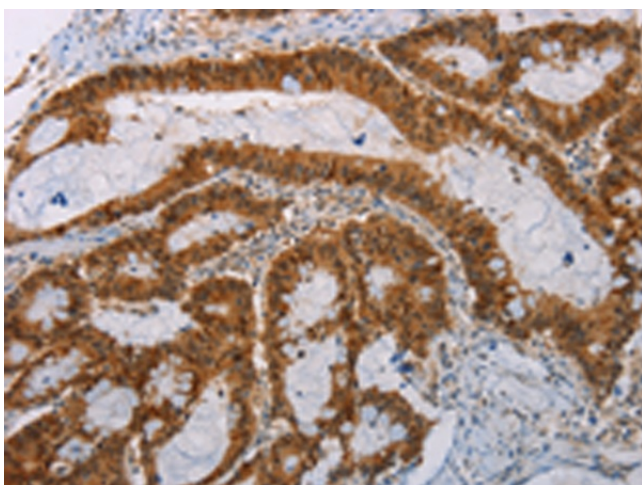
Exposure time: 2 minutes



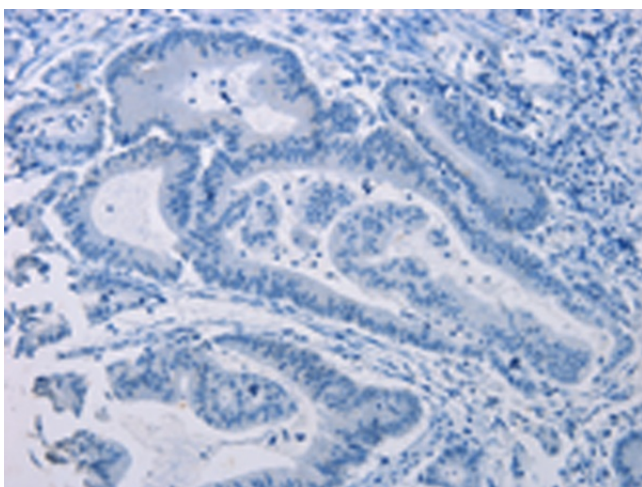
Immunohistochemistry of paraffin-embedded Human gastric cancer tissue using TA323594 (ACY1 Antibody) at dilution 1/25 (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human gastric cancer tissue using TA323594 (ACY1 Antibody) at dilution 1/25, treated with fusion protein. (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human colon cancer tissue using TA323594 (ACY1 Antibody) at dilution 1/25 (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human colon cancer tissue using TA323594 (ACY1 Antibody) at dilution 1/25, treated with fusion protein. (Original magnification: ×200)