

## Product datasheet for **TA323995S**

### ALDH4A1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 500-2000 WB positive control: Human fetal liver and liver cancer tissue IHC: 50-200 Positive control: Human breast cancer Predicted cell location: Cytoplasm
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Fusion protein corresponding to C terminal 250 amino acids of human aldehyde dehydrogenase 4 family, member A1
Formulation:	PBS pH7.3, 0.05% NaN <sub>3</sub> , 50% glycerol
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:	62 kDa
Gene Name:	aldehyde dehydrogenase 4 family member A1
Database Link:	<a href="#">NP_001154976</a> <a href="#">Entrez Gene 212647</a> <a href="#">MouseEntrez Gene 641316</a> <a href="#">RatEntrez Gene 8659</a> <a href="#">Human P30038</a>



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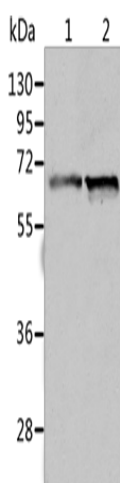
**Background:** This protein belongs to the aldehyde dehydrogenase family of proteins. This enzyme is a mitochondrial matrix NAD-dependent dehydrogenase which catalyzes the second step of the proline degradation pathway, converting pyrroline-5-carboxylate to glutamate. Deficiency of this enzyme is associated with type II hyperprolinemia, an autosomal recessive disorder characterized by accumulation of delta-1-pyrroline-5-carboxylate (P5C) and proline. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene.

**Synonyms:** ALDH4; P5CD; P5CDh

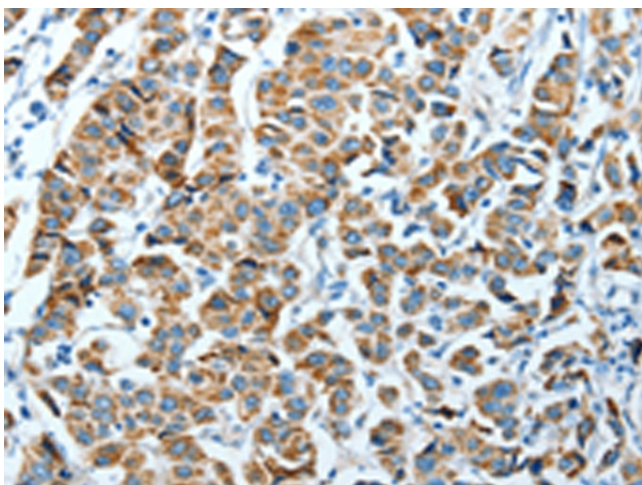
**Protein Families:** Druggable Genome

**Protein Pathways:** Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Metabolic pathways

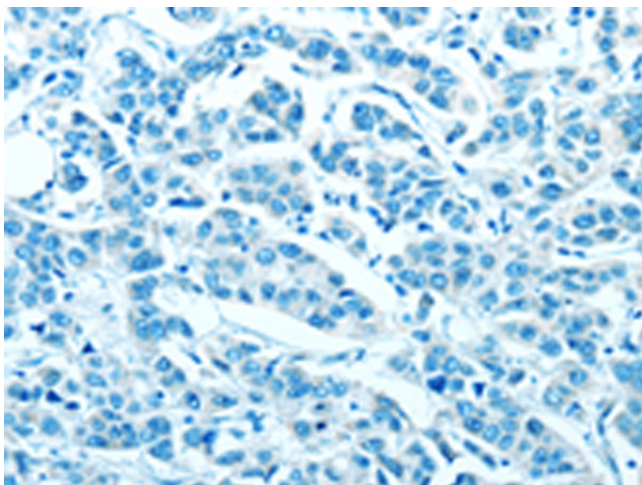
### Product images:



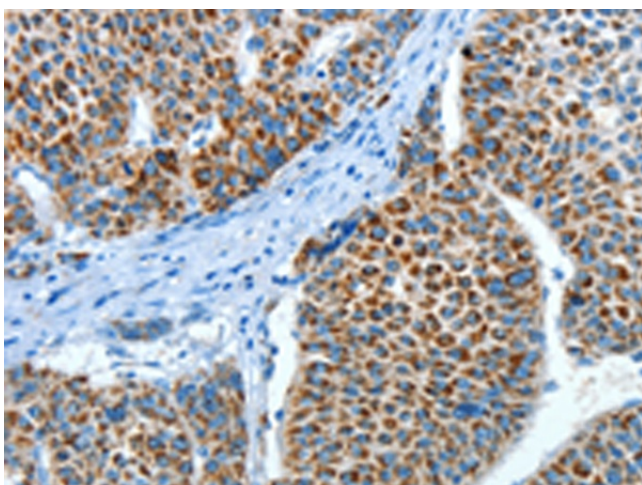
Gel: 10%SDS-PAGE  
Lysate: 40  $\mu$ g  
Lane 1-2: Human fetal liver tissue  
Human liver cancer tissue  
Primary antibody: [TA323995] (ALDH4A1 Antibody) at dilution 1/450  
Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution  
Exposure time: 30 seconds



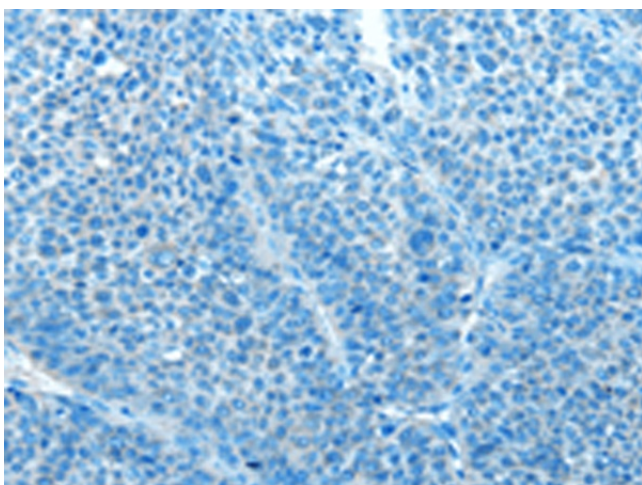
Immunohistochemistry of paraffin-embedded Human breast cancer tissue using [TA323995] (ALDH4A1 Antibody) at dilution 1/45 (Original magnification:  $\times$ 200)



Immunohistochemistry of paraffin-embedded Human breast cancer tissue using [TA323995] (ALDH4A1 Antibody) at dilution 1/45, treated with fusion protein. (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using [TA323995] (ALDH4A1 Antibody) at dilution 1/45 (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using [TA323995] (ALDH4A1 Antibody) at dilution 1/45, treated with fusion protein. (Original magnification:  $\times 200$ )