

Product datasheet for **TA322128S**

ADO Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1000-5000 WB positive control: Mouse testis tissue IHC: 25-100 Positive control: Human liver cancer Predicted cell location: Cytoplasm
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to a region derived from 161-174 amino acids of Human 2-aminoethanethiol (cysteamine) dioxygenase
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 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:	30 kDa
Gene Name:	2-aminoethanethiol (cysteamine) dioxygenase
Database Link:	NP_116193 Entrez Gene 211488 Mouse Entrez Gene 84890 Human Q96SZ5



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Background:

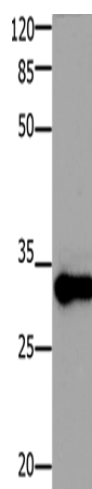
Human thiol dioxygenases include cysteine dioxygenase (CDO; MIM 603943) and cysteamine (2-aminoethanethiol) dioxygenase (ADO; EC 1.13.11.19). CDO adds 2 oxygen atoms to free cysteine; whereas ADO adds 2 oxygen atoms to free cysteamine to form hypotaurine. Mouse Ado has strong and specific dioxygenase activity in vitro towards cysteamine but not cysteine. Recombinant Ado was shown to bind iron. Overexpression of Ado in HepG2/C3A cells increased the production of hypotaurine from cysteamine. Similar results were found with human ADO. When endogenous expression of ADO was reduced by RNA-mediated interference; hypotaurine production decreased. The demonstration of high levels of ADO in brain challenges the previous assumption that most of the taurine in the brain is a consequence of CDO activity.

Synonyms:

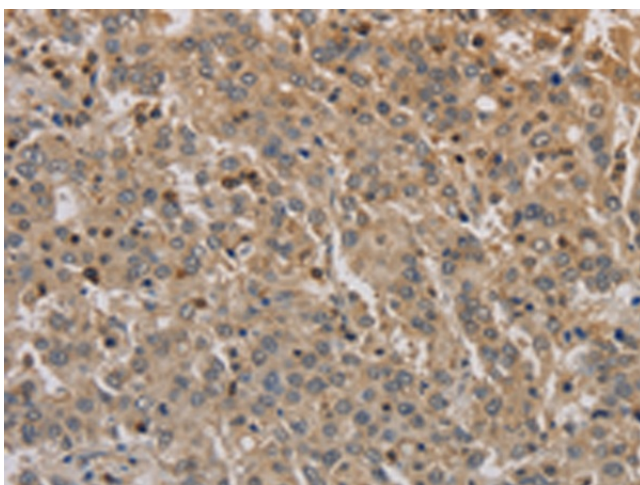
C10orf22

Protein Pathways:

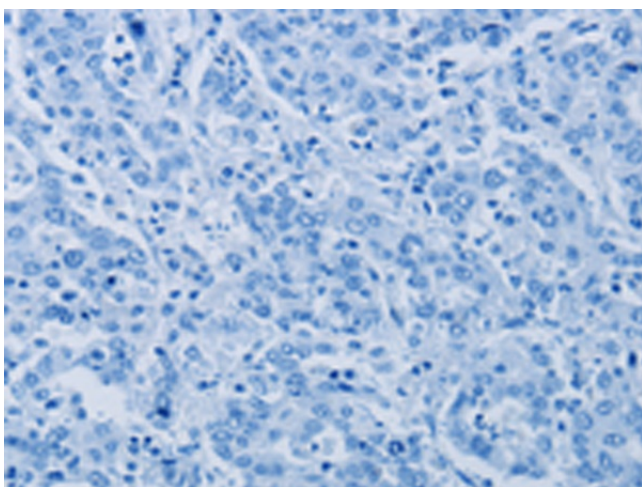
Metabolic pathways, Taurine and hypotaurine metabolism

Product images:

Gel: 10%SDS-PAGE
Lysate: 30 µg
Lane: Mouse testis tissue
Primary antibody: [TA322128] (ADO Antibody) at dilution 1/1200
Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution
Exposure time: 30 minutes



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using [TA322128] (ADO Antibody) at dilution 1/30 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using [TA322128] (ADO Antibody) at dilution 1/30, treated with synthetic peptide. (Original magnification: $\times 200$)