

S13A5 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4740c

Specification

S13A5 Antibody (Center) - Product Information

Application WB,E
Primary Accession Q86YT5
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 151-180

S13A5 Antibody (Center) - Additional Information

Gene ID 284111

Other Names

Solute carrier family 13 member 5, Na(+)/citrate cotransporter, NaCT, Sodium-coupled citrate transporter, Sodium-dependent citrate transporter, SLC13A5, NACT

Target/Specificity

This S13A5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 151-180 amino acids from the Central region of human S13A5.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

S13A5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

S13A5 Antibody (Center) - Protein Information

Name SLC13A5

Synonyms NACT



Function High-affinity sodium/citrate cotransporter that mediates the entry of citrate into cells, which is a critical participant of biochemical pathways (PubMed:12445824, PubMed:12826022, PubMed:26324167, PubMed:26384929, PubMed:30054523, PubMed:33597751). May function in various metabolic processes in which citrate has a critical role such as energy production (Krebs cycle), fatty acid synthesis, cholesterol synthesis, glycolysis, and gluconeogenesis (PubMed:12826022). Transports citrate into the cell in a Na(+)- dependent manner, recognizing the trivalent form of citrate (physiological pH) rather than the divalent form (PubMed:12445824, PubMed:12826022, PubMed:26324167, PubMed:26384929, PubMed:30054523, PubMed:33597751). Can recognize succinate as a substrate, but its affinity for succinate is several fold lower than for citrate (PubMed:26324167). The stoichiometry is probably 4 Na(+) for each carboxylate, irrespective of whether the translocated substrate is divalent or trivalent, rendering the process electrogenic (PubMed:12445824, PubMed:12826022). Involved in the regulation of citrate levels in the brain (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Expressed most predominantly in the liver, with moderate expression detectable in the brain and testis

S13A5 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

S13A5 Antibody (Center) - Images

S13A5 Antibody (Center) - Background

S13A5 is a tricarboxylate plasma transporter with a preference for citrate.

S13A5 Antibody (Center) - References

Gopal, E., et al. Am. J. Physiol. Gastrointest. Liver Physiol. 292 (1), G402-G408 (2007) Pajor, A.M. Pflugers Arch. 451(5):597-605(2006) Inoue, K., et al. Biochem. J. 374 (PT 1), 21-26 (2003)