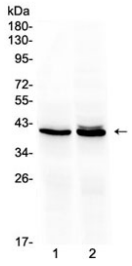
OTC Antibody / OTCase Antibody (R32654)

Catalog No.	Formulation	Size
R32654	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse, Rat
Predicted Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P00480
Applications	Western blot: 0.5-1ug/ml
Limitations	This OTC Antibody / OTCase Antibody is available for research use only.



OTC Antibody Rat and Mouse Liver WB. Western blot analysis of lane 1: rat liver and lane 2: mouse liver lysates using OTC Antibody / OTCase Antibody at 0.5 ug/ml. A specific band is detected at approximately 40 kDa, consistent with the expected molecular weight of ornithine transcarbamylase. The strong signal observed in both liver samples reflects the abundant expression of this mitochondrial urea cycle enzyme in hepatic tissue. This OTC Antibody, also called OTCase Antibody, is suitable for studies of urea cycle metabolism, ammonia detoxification, mitochondrial enzymes, and hepatic protein expression.

Description

OTC Antibody / OTCase Antibody recognizes ornithine transcarbamylase (OTC), a mitochondrial enzyme that catalyzes the conversion of ornithine and carbamoyl phosphate into citrulline during the urea cycle. This reaction is a fundamental step in ammonia detoxification, allowing excess nitrogen generated during amino acid metabolism to be converted into urea for excretion. Because OTC is highly expressed in hepatocytes and also present in intestinal tissue, it serves as an important marker for studies of liver metabolism, mitochondrial biology, and nitrogen homeostasis. NSJ Bioreagents

provides OTC Antibody / OTCase Antibody for researchers investigating metabolic pathways and mitochondrial enzymes.

OTC is localized within the mitochondrial matrix, where it functions alongside the other urea cycle enzymes to maintain normal ammonia levels. Proper OTC activity is essential for preventing the accumulation of toxic nitrogen metabolites and supporting normal hepatic physiology. An OTC Antibody is therefore valuable for examining mitochondrial protein expression, metabolic regulation, and the functional integrity of the urea cycle in normal and experimental tissues.

Mutations affecting the OTC gene are responsible for ornithine transcarbamylase deficiency, the most common inherited disorder of the urea cycle. As a result, OTC has become an important research target in studies of inherited metabolic disease, liver biology, hyperammonemia, mitochondrial dysfunction, and gene therapy. It is also widely used in investigations of hepatic differentiation, metabolic adaptation, and mitochondrial enzyme regulation.

An OTC Antibody is a useful reagent for investigating ornithine transcarbamylase expression, urea cycle function, ammonia detoxification, mitochondrial metabolism, liver physiology, and metabolic disease.

Learn more about ornithine transcarbamylase biology, urea cycle metabolism, and our Ornithine Transcarbamylase Antibody page for additional validation data and research resources.

Application Notes

Optimal dilution of the OTC Antibody / OTCase Antibody should be determined by the researcher.

Immunogen

Amino acids 33-70 (NKVQLKGRDLLTLKNFTGEEIKYMLWLSADLKFRIKQK) from the human protein were used as the immunogen for the OTC antibody.

Storage

After reconstitution, the OTC antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

OTC antibody, OTCase antibody, Ornithine Transcarbamylase antibody, Ornithine Carbamoyltransferase antibody

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