SANTA CRUZ BIOTECHNOLOGY, INC.

# uricase (N-20): sc-23669

## BACKGROUND

In most mammals, urate oxidase (uricase) is present in liver, with little or no detectable activity in other tissues. It is associated with the peroxisomes and exists as a tetramer. Humans and certain primates lack this enzyme, which catalyzes the oxidation of uric acid to allantoin. The human Lesch-Nyhan syndrome is a rare neurological and behavioural disorder caused by an inherited deficiency in the level of activity of the purine salvage enzyme hypoxanthine-guanosine phosphoribosyl transferase (HPRT). The identification of mice with complete HPRT deficiency but without any symptoms of the Lesch-Nyhan syndrome raises the possibility that the absence of uricase activity in the purine metabolism pathway may contribute to the development of the neurologic symptoms observed in humans. Comparison of the sequences in man, mouse and pig suggested that loss of uricase function in man was due to a sudden mutational event. The gene which encodes uricase maps to human chromosome 1p22.

## CHROMOSOMAL LOCATION

Genetic locus: Uox (mouse) mapping to 3 H2.

## SOURCE

uricase (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of uricase of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23669 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

uricase (N-20) is recommended for detection of uricase of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

uricase (N-20) is also recommended for detection of uricase in additional species, including canine and bovine.

Suitable for use as control antibody for uricase siRNA (m): sc-41089, uricase shRNA Plasmid (m): sc-41089-SH and uricase shRNA (m) Lentiviral Particles: sc-41089-V.

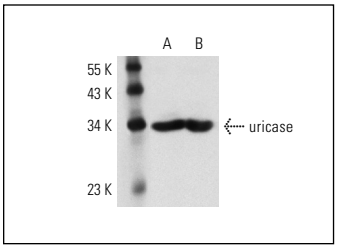
Molecular Weight of uricase: 32 kDa.

Positive Controls: mouse liver extract: sc-2256, rat liver extract: sc-2395 or uricase (m): 293T Lysate: sc-124484.

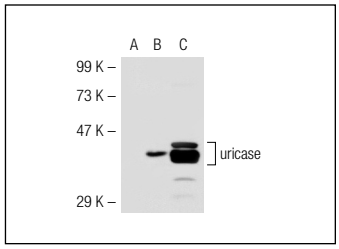
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA




uricase (N-20): sc-23669. Western blot analysis of uricase expression in mouse liver (**A**) and rat liver (**B**) tissue extracts.




uricase (N-20): sc-23669. Western blot analysis of uricase expression in non-transfected: sc-117752 (**A**) and mouse uricase transfected: sc-124484 (**B**) 293T whole cell lysates and mouse liver tissue extract (**C**).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.