

UROD (N-13): sc-131821

BACKGROUND

Uroporphyrinogen decarboxylase, also known as UROD or UPD, is a 367 amino acid protein that exists as a homodimer. UROD is the fifth enzyme in the human heme biosynthetic pathway and is responsible for the conversion of uroporphyrinogen to coproporphyrinogen through the removal of four carboxymethyl side chains. Mutations in the UROD gene are responsible for three autosomal disorders in humans: familial porphyria cutanea tarda (f-PCT), sporadic porphyria cutanea tarda (s-PCT) and hepatoerythropoietic porphyria (HEP). F-PCT is an autosomal dominant disorder characterized by late-onset light-sensitive dermatitis. High levels of uroporphyrin excretion in the urine and varying degrees of liver damage are associated with this disease. S-PCT is an idiosyncratic form of PCT that is characterized by a reduction of liver enzymes. HEP is an autosomal recessive disorder that affects infants. It is characterized by excessive excretion of acetate-substituted porphyrins and accumulation of protoporphyrin in erythrocytes.

CHROMOSOMAL LOCATION

Genetic locus: UROD (human) mapping to 1p34.1; Urod (mouse) mapping to 4 D1.

SOURCE

UROD (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of UROD of human 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-131821 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

UROD (N-13) is recommended for detection of UROD of mouse, rat and human 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).

UROD (N-13) is also recommended for detection of UROD in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for UROD siRNA (h): sc-88548, UROD siRNA (m): sc-154937, UROD shRNA Plasmid (h): sc-88548-SH, UROD shRNA Plasmid (m): sc-154937-SH, UROD shRNA (h) Lentiviral Particles: sc-88548-V and UROD shRNA (m) Lentiviral Particles: sc-154937-V.

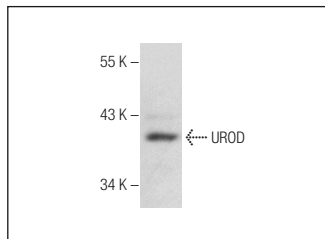
Molecular Weight of UROD: 41 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, UROD (h): 293T Lysate: sc-170721 or Hep G2 cell lysate: sc-2227.

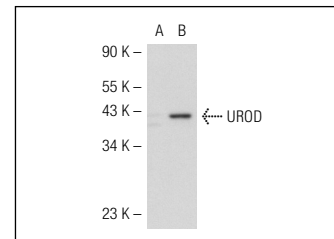
RECOMMENDED SECONDARY REAGENTS

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



UROD (N-13): sc-131821. Western blot analysis of UROD expression in K-562 whole cell lysate.



UROD (N-13): sc-131821. Western blot analysis of UROD expression in non-transfected: sc-117752 (A) and human UROD transfected: sc-170721 (B) 293T whole cell lysates.

STORAGE

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

PROTOCOLS

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



Try **UROD (G-7): sc-374318** or **UROD (C-4): sc-365297**, our highly recommended monoclonal alternatives to UROD (N-13).