

Rnls Protein, Mouse (His-SUMO)

Cat. No.:	HY-P71521
Synonyms:	Rnls; Renalase; EC 1.6.3.5; Monoamine oxidase-C; MAO-C; mMAO-C
Species:	Mouse
Source:	E. coli
Accession:	A7RDN6 (18A-342I)
Gene ID:	67795
Molecular Weight:	Approximately 52.0 kDa

PROPERTIES

AA Sequence

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A L L R K E I T A P   L Y L G L W D K G G   D I G G R M I T A S   S P H N P R C T A D
L G A Q Y I T C S P   H Y V K E H Q N F Y   E E L L A H G I L K   P L T S P I E G M K
G K E G D C N F V A   P Q G F S S V I K Y   Y L K K S G A E V S   L K H C V T Q I H L
K D N K W E V S T D   T G S A E Q F D L V   I L T M P A P Q I L   E L Q G D I V N L I
S E R Q R E Q L K S   V S Y S S R Y A L G   L F Y E V G M K I G   V P W S C R Y L S S
H P C I C F I S I D   N K K R N I E S S E   C G P S V V I Q T T   V P F G V Q H L E A
S E A D V Q K L M I   Q Q L E T I L P G L   P Q P V A T I C H K   W T Y S Q V T S S V
S D R P G Q M T L H   L K P F L V C G G D   G F T H S N F N G C   I S S A L S V M K V
L K R Y I
  
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Biological Activity The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

Appearance Lyophilized powder.

Formulation Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.

Endotoxin Level <1 EU/μg, determined by LAL method.

Reconstitution It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH₂O.

Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

Renalase (Rnls) is an enzyme that catalyzes the oxidation of the less abundant 1,2-dihydro-beta-NAD(P) and 1,6-dihydro-beta-NAD(P) to form beta-NAD(P)(+). This enzyme is primarily secreted by the kidney, circulating in the blood and playing a

crucial role in modulating cardiac function and systemic blood pressure. Renalase has been identified as a key factor in lowering blood pressure in vivo, achieved by decreasing cardiac contractility and heart rate while preventing a compensatory increase in peripheral vascular tone. This suggests a causal link between renalase, increased plasma catecholamine levels, and heightened cardiovascular risk. Notably, high concentrations of catecholamines activate plasma renalase, promoting its secretion and synthesis. The multifaceted functions of renalase underscore its significance in cardiovascular regulation and its potential as a therapeutic target for managing blood pressure and cardiovascular health.

Caution: Product has not been fully validated for medical applications. For research use only.

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