

PRODUCT INFORMATION



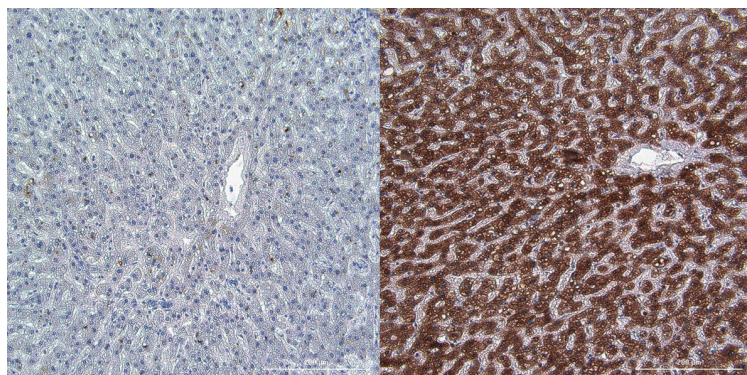
11 β -Hydroxysteroid Dehydrogenase (Type 1) Polyclonal Antibody

Item No. 10004303

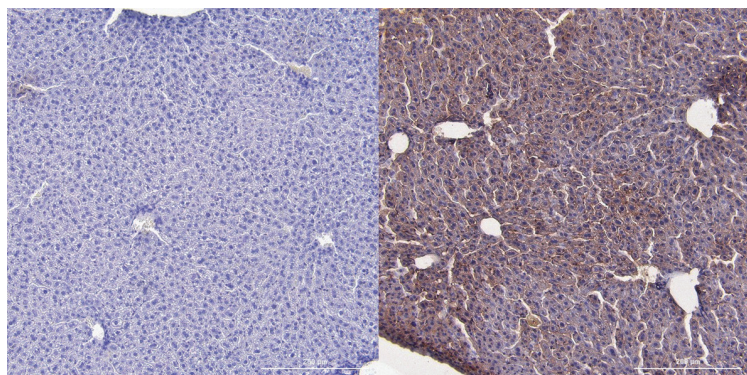
Overview and Properties

Contents:	This vial contains 500 μ l of peptide affinity-purified polyclonal antibody.
Synonyms:	Corticosteroid 11- β -Dehydrogenase Isozyme 1, 11-DH, 11 β -HSD1, Short Chain Dehydrogenase/Reductase Family 26C Member 1
Immunogen:	Synthetic peptide from the an internal region of human 11 β -HSD1
Species Reactivity:	(+) Human, mouse, and rat; other species not tested
Uniprot No.:	P28845
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	\geq 3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:100 and 1:200, respectively. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

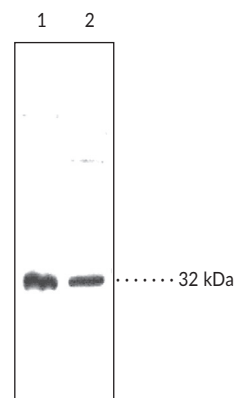
Images



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human liver tissue after heat-induced antigen retrieval in pH 6.0 citrate buffer, after incubation with 11 β -Hydroxysteroid Dehydrogenase (Type 1) Polyclonal Antibody, (Item No. 10004303), at a 1:100 dilution (left panel, secondary alone).



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) mouse liver tissue after heat-induced antigen retrieval in pH 6.0 citrate buffer, after incubation with 11 β -Hydroxysteroid Dehydrogenase (Type 1) Polyclonal Antibody, (Item No. 10004303), at a 1:100 dilution (left panel, secondary alone).



Lane 1: Rat liver microsomes (50 μ g)
Lane 2: Mouse liver microsomes (50 μ g)

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/07/2023

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

11 β -Hydroxysteroid dehydrogenase (Type 1) (11 β -HSD1) catalyzes the conversion of inactive cortisone to active cortisol in adipose tissue. mRNA and protein for this enzyme have been detected in a wide range of tissues including liver, kidney, testis, lung, heart, and colon.¹ The enzyme's expression is developmentally regulated, suggesting its importance in regulation of glucocorticoid action during embryonic development.² Over-expression of 11 β -HSD1 results in visceral obesity and metabolic syndrome including insulin-resistant diabetes, hyperlipidemia, and hyperphagia.³ Cayman's 11 β -HSD1 Polyclonal Antibody detects a 32 kDa protein in human, mouse, and rat liver samples by western blot analysis. The antibody can be used on paraffin-embedded tissue sections to detect 11 β -HSD1 expression.

References

1. White, P.C., Mune, T., and Agarwal, A.K. 11 β -hydroxysteroid dehydrogenase and the syndrome of apparent mineralocorticoid excess. *Endocr. Rev.* **18**(1), 135-156 (1997).
2. Thompson, A., Han, V.K.M., and Yang, K. Differential expression of 11 β -hydroxysteroid dehydrogenase types 1 and 2 mRNA and glucocorticoid receptor protein during mouse embryonic development. *J. Steroid Biochem. Molec. Biol.* **88**(4-5), 367-375 (2004).
3. Masuzaki, H., Paterson, J., Shinyama, H., *et al.* A transgenic model of visceral obesity and the metabolic syndrome. *Science* **294**(5549), 2166-2170 (2001).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM