SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

PRODUCT INFORMATION

11β-Hydroxysteroid Dehydrogenase Type 1

Item No. 10007815

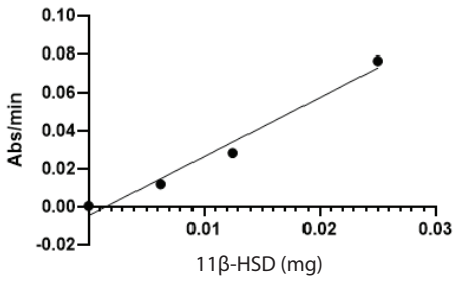
Overview and Properties

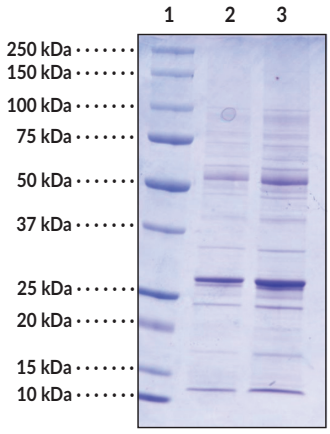
Synonyms: 11β-HSD1, HSD11β
Source: Active recombinant N-terminal His-tagged protein, expressed in *E. coli*
Uniprot No.: P28845

Batch specific information can be found on the Certificate of Analysis or by contacting Technical Support

Molecular Weight: 31.4 kDa
Storage: -80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein
Stability: As supplied, 6 months from the QC date provided on the Certificate of Analysis, when stored properly
Purity: ***batch specific*** (≥40% estimated by SDS-PAGE)
Supplied in: 50 mM Potassium phosphate pH 7.6, with 5% glycerol, 50 mM sodium chloride, 1 mM EDTA, and 0.1 mM DTT
Protein Concentration: ***batch specific*** mg/ml
Activity: ***batch specific*** U/ml
Unit Definition: One unit corresponds to the amount of enzyme required to consume NADH at 340 nm in the buffer (50 mM potassium phosphate buffer, pH 7.5) containing 20 mM cortisone, kinetically for 20 minutes at 37°C containing 1 mM NADH

Images





Lane 1: MW Markers
Lane 2: Purified 11β-HSD1 (2 µg)
Lane 3: Purified 11β-HSD1 (4 µg)

Representative gel image shown; actual purity may vary between each batch.

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

11β-Hydroxysteroid dehydrogenase (11β-HSD) exists as two isozymes 11β-HSD1 and 11β-HSD2.[1] Both isoforms are members of the short-chain dehydrogenase/reductase (SDRs) family.[2] 11β-HSD1 is a membrane-bound glycoprotein localized on the endoplasmic reticulum. The main catalytic domain of 11β-HSD1 lies within the lumen of the ER. A short five amino acid N-terminal region extends into the cytoplasm and is linked to the catalytic portion through a single transmembrane helix.[1] 11β-HSD1 is a relatively low-affinity NADP-dependent enzyme with a bidirectional catalytic activity. The dehydrogenase activity of 11β-HSD1 catalyzes the conversion of cortisol to cortisone. The primary function of 11β-HSD1 is the oxoreduction of cortisone to the active glucocorticoid cortisol.[2] Cortisol is a steroid hormone essential for a variety of physiological and homeostatic functions.

References

1. Walker, E.A., Clark, A.M., Hewison, M., *et al.* Functional expression, characterization, and purification of the catalytic domain of human 11β-hydroxysteroid dehydrogenase type 1. *J. Biol. Chem.* **276(24)**, 21343-21350 (2001).
2. Blum, A., Martin, H.-J., and Maser, E. Human 11β-hydroxysteroid dehydrogenase type 1 is enzymatically active in its nonglycosylated form. *Biochem. Biophys. Res. Commun.* **276**, 428-434 (2000).

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