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Anti-DHRS7 Antibody

Catalog # AP51757

Product Information

Application	WB
Primary Accession	Q9Y394
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38299

Additional Information

Gene ID	51635
Other Names	DHRS7A; RETSDR4; Dehydrogenase/reductase SDR family member 7; Retinal short-chain dehydrogenase/reductase 4; retSDR4
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human DHRS7. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	DHRS7 (HGNC:21524)
Function	NADPH-dependent oxidoreductase which catalyzes the reduction of a variety of compounds bearing carbonyl groups including steroids, retinoids and xenobiotics (PubMed:24246760, PubMed:26466768, PubMed:28457967, PubMed:28687384). Catalyzes the reduction/inactivation of 5alpha-dihydrotestosterone to 3alpha-androstanediol, with a possible role in the modulation of androgen receptor function (PubMed:28457967, PubMed:28687384). Involved in the reduction of all-trans-retinal to all-trans-retinol (PubMed:26466768). Converts cortisone to 20beta-dihydrocortisone in vitro, although the physiological relevance of this activity is questionable (PubMed:28457967). Reduces exogenous compounds such as quinones (1,2-naphtoquinone, 9,10-phenantrenequinone and benzoquinone) and other xenobiotics (alpha-diketones) in vitro, suggesting a role in the biotransformation of xenobiotics with carbonyl group (PubMed:24246760, PubMed:26466768). A dehydrogenase activity has not been detected so far (PubMed:24246760). May play a role as tumor suppressor

(PubMed:26311046).

Cellular Location

Endoplasmic reticulum membrane. Note=Bound to the endoplasmic reticulum membrane, possibly through a N-terminus anchor. The main bulk of the polypeptide chain was first reported to be facing toward the lumen of the endoplasmic reticulum (PubMed:24246760) However, it was later shown to be facing the cytosol (PubMed:28457967)

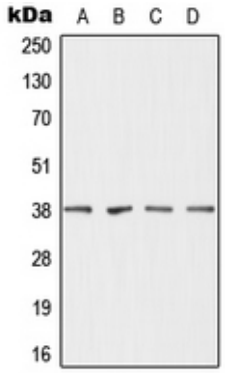
Tissue Location

Found predominantly in the adrenal glands, liver, thyroid, prostate, small intestine, colon, stomach, kidney and brain (PubMed:26466768). Lower levels observed in skeletal muscle, the lung and the spleen (PubMed:26466768).

References

Lai C.-H.,et al.Genome Res. 10:703-713(2000).
Haeseleer F.,et al.Methods Enzymol. 316:372-383(2000).
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Heilig R.,et al.Nature 421:601-607(2003).

Images



Western blot analysis of DHRS7 expression in MCF7 (A), HepG2 (B), mouse liver (C), rat liver (D) whole cell lysates. (Predicted band size: 38 kD; Observed band size: 38 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.