10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DHRS11 Rabbit pAb

Catalog # AP99495

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q6UWP2
Other Accession	Q6UWP2
Reactivity	Human
Predicted	Rat, Pig, Mouse, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28308
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DHRS11
Epitope Specificity	181-260/260
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the short-chain dehydrogenases/reductases (SDR) family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	DHRS11 is a 260 amino acid secreted protein. Belonging to the short-chain dehydrogenases/reductases (SDR) family, DHRS11 forms a homotetramer and is expressed as two isoforms produced by alternative splicing events. The gene that encodes DHRS11 maps to human chromosome 17, which makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes. Chromosome 17 is also linked to neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

Additional Information

Gene ID	79154
Other Names	SDR24C1; ARPG836; spDHRS11; RGD1307935; DHR11_HUMAN; DHRS11; 17-beta-hydroxysteroid dehydrogenase; 3-beta-hydroxysteroid 3-dehydrogenase; Estradiol 17-beta-dehydrogenase; Short-chain dehydrogenase/reductase family 24C member 1; DHR11_MOUSE;

	dehydrogenase/reductase 11; dehydrogenase/reductase (SDR family) member 11; short chain dehydrogenase/reductase family 24C, member 1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	DHRS11
Synonyms	SDR24C1 {ECO:0000303|PubMed:19027726}
Function	Catalyzes the conversion of the 17-keto group of estrone, 4- and 5-androstenes and 5-alpha-androstanes into their 17-beta- hydroxyl metabolites and the conversion of the 3-keto group of 3-, 3,17- and 3,20-diketosteroids into their 3beta-hydroxyl metabolites. Exhibits reductive 3-beta-hydroxysteroid dehydrogenase activity toward 5-beta-androstanes, 5-beta-pregnanes, 4-pregnenes and bile acids (PubMed:26920053). May contribute to the metabolism of adrenal-derived androgen precursors. Reduces 11-keto-4-androstene-3,17-dione (11KA4) and 11-keto-5alpha-androstane-3,17-dione (11K-Adione) into potent androgens 11-ketotestosterone (11KT) and 11-ketodihydrotestosterone (11KDHT), respectively (PubMed:31926269). May also reduce endogenous and exogenous alpha-dicarbonyl compounds and xenobiotic alicyclic ketones (PubMed:26920053).
Cellular Location	Secreted.
Tissue Location	Isoform 1: Ubiquitously expressed, with highest levels in testis, small intestine, colon, kidney, brain and heart Isoform 3: Expressed in brain, heart and skeletal muscle

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