

## **HSD17B12 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9351c

# **Specification**

# **HSD17B12** Antibody (Center) - Product Information

Application WB, FC, IHC-P,E

**Primary Accession** O53G00 **Q4R5G7** Other Accession Reactivity Human Predicted Monkey Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 34324 Antigen Region 126-155

# **HSD17B12** Antibody (Center) - Additional Information

# **Gene ID 51144**

## **Other Names**

Estradiol 17-beta-dehydrogenase 12, 17-beta-hydroxysteroid dehydrogenase 12, 17-beta-HSD 12, 3-ketoacyl-CoA reductase, KAR, 131-, HSD17B12

# Target/Specificity

This HSD17B12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 126-155 amino acids from the Central region of human HSD17B12.

## **Dilution**

WB~~1:1000 FC~~1:10~50 IHC-P~~1:10~50

E~~Use at an assay dependent concentration.

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

# Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

HSD17B12 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **HSD17B12** Antibody (Center) - Protein Information



# Name HSD17B12 (HGNC:18646)

### Synonyms SDR12C1

**Function** Catalyzes the second of the four reactions of the long-chain fatty acids elongation cycle. This endoplasmic reticulum-bound enzymatic process, allows the addition of two carbons to the chain of long- and very long-chain fatty acids/VLCFAs per cycle. This enzyme has a 3-ketoacyl-CoA reductase activity, reducing 3-ketoacyl-CoA to 3- hydroxyacyl-CoA, within each cycle of fatty acid elongation. Thereby, it may participate in the production of VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. May also catalyze the transformation of estrone (E1) into estradiol (E2) and play a role in estrogen formation.

#### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein

#### **Tissue Location**

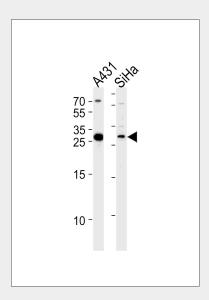
Expressed in most tissues tested. Highly expressed in the ovary and mammary. Expressed in platelets

## **HSD17B12** Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

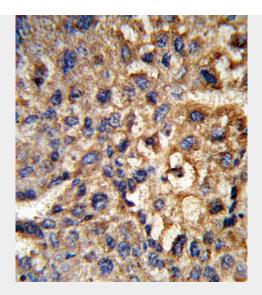
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **HSD17B12 Antibody (Center) - Images**

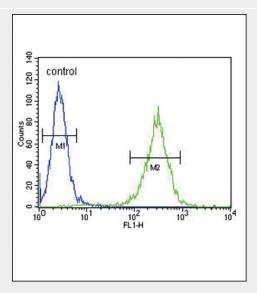


HSD17B12 Antibody (Center) (Cat. #AP9351c) western blot analysis in A431,SiHa cell line lysates (35ug/lane). This demonstrates the HSD17B12 antibody detected the HSD17B12 protein (arrow).





Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with HSD17B12 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



HSD17B12 Antibody (Center) (Cat. #AP9351c) flow cytometric analysis of A2058 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# HSD17B12 Antibody (Center) - Background

The enzyme 17-beta hydroxysteroid dehydrogenase-12 (HSD17B12) uses NADPH to reduce 3-ketoacyl-CoA to 3-hydroxyacyl-CoA during the second step of fatty acid elongation.

# **HSD17B12** Antibody (Center) - References

Plourde, M. J. Steroid Biochem. Mol. Biol. 116 (3-5), 134-153 (2009) Nagasaki, S. Mol. Cell. Endocrinol. 307 (1-2), 163-168 (2009) Bellemare, V. J. Steroid Biochem. Mol. Biol. 114 (3-5), 129-134 (2009)