

#### **DCXR Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7443c

#### **Specification**

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

Application FC, IHC-P, WB,E

Primary Accession <u>Q7Z4W1</u>

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 25913
Antigen Region 79-106

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

#### **Gene ID 51181**

#### **Other Names**

L-xylulose reductase, XR, Carbonyl reductase II, Dicarbonyl/L-xylulose reductase, Kidney dicarbonyl reductase, kiDCR, Sperm surface protein P34H, DCXR

#### Target/Specificity

This DCXR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 79-106 amino acids from the Central region of human DCXR.

#### **Dilution**

FC~~1:10~50 IHC-P~~1:50~100 WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

# **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**

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

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

### **Name DCXR**



#### Synonyms SDR20C1

**Function** Catalyzes the NADPH-dependent reduction of several pentoses, tetroses, trioses, alpha-dicarbonyl compounds and L-xylulose. Participates in the uronate cycle of glucose metabolism. May play a role in the water absorption and cellular osmoregulation in the proximal renal tubules by producing xylitol, an osmolyte, thereby preventing osmolytic stress from occurring in the renal tubules.

#### **Cellular Location**

Membrane; Peripheral membrane protein. Note=Probably recruited to membranes via an interaction with phosphatidylinositol.

#### **Tissue Location**

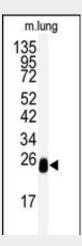
Highly expressed in kidney, liver and epididymis. In the epididymis, it is mainly expressed in the proximal and distal sections of the corpus region. Weakly or not expressed in brain, lung, heart, spleen and testis.

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

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

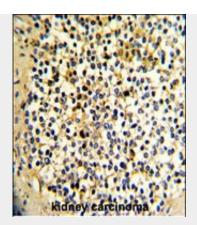
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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

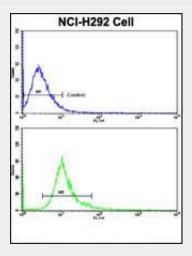


Western blot analysis of anti-DCXR Antibody (Center)(Cat.#AP7443c) in mouse lung tissue lysates (35ug/lane). DCXR (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human kidney carcinoma with DCXR 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.



Flow cytometric analysis of NCI-H292 cells using DCXR Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## DCXR Antibody (Center) - Background

DCXR is an enzyme that has both diacetyl reductase and L-xylulose reductase activities.

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

Nakagawa J., Ishikura S.J. Biol. Chem. 277:17883-17891(2002) Xia X.Y., Xu X.F., Gao Y.Zhonghua Nan Ke Xue 9:24-27(2003) El-Kabbani O., Chung R.P.-T.Acta Crystallogr. D 58:1379-1380(2002)