

Product datasheet for AP14090PU-N

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

OriGene Technologies, Inc.

DCXR Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: FC, IHC, WB

Recommended Dilution: ELISA: 1/1000.

Western blotting: 1/1000. Flow Cytometry: 1/10-1/50.

Immunohistochemistry on Paraffin Sections: 1/50-1/100.

Reactivity: Human, Mouse

Host: Rabbit

Isotype: lg

Clonality: Polyclonal

Immunogen: KLH conjugated synthetic peptide between 79-106 amino acids from the Central region of

Human DCXR.

Specificity: This antibody recognizes Human and Mouse DCXR.

Other species not tested.

Formulation: PBS

State: Purified

State: Liquid purified Ig fraction

Preservative: 0.09% (W/V) Sodium Azide

Concentration: lot specific

Purification: Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 25913 Da (calculated)

Gene Name: dicarbonyl/L-xylulose reductase

Database Link: <u>Entrez Gene 51181 Human</u>

Q7Z4W1





Background:

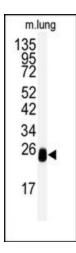
DCXR is an enzyme that has both diacetyl reductase and L-xylulose reductase activities. **Function:** Catalyzes the NADPH-dependent reduction of several pentoses, tetroses, trioses, alpha-dicarbonyl compounds and L- xylulose. Participates in the uronate cycle of glucose metabolism May play a role in 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 (By similarity). Note=Probably recruited to membranes via an interaction with phosphatidylinositol (By similarity). **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.

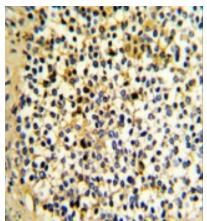
Synonyms:

XR, DCXR, Carbonyl reductase II, P34H

Product images:

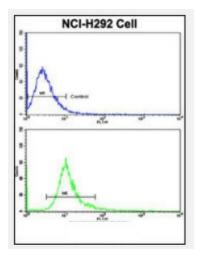


Western blot analysis of anti-DCXR Antibody (Center) in Mouse lung tissue lysates (35ug/lane). DCXR (arrow) was detected using the purified Pab.



Formalin-Fixed, Paraffin-Embedded Human kidney carcinoma stained 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.