

### Anti-DCXR antibody [4G4AF5] $\alpha$ b110283

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#### Overview

<b>Product name</b>	Anti-DCXR antibody [4G4AF5]
<b>Description</b>	Mouse monoclonal [4G4AF5] to DCXR
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Tissue, cells or virus. This information is considered to be commercially sensitive.
<b>Positive control</b>	Isolated human liver mitochondria; Human HDFn cells; HL-60 cells.
<b>General notes</b>	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	<p>pH: 7.5</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: HEPES buffered saline</p>
<b>Purity</b>	Affinity purified
<b>Purification notes</b>	The antibody was produced in vitro using hybridomas grown in serum-free medium, and then purified by affinity purification. Purity near homogeneity as judged by SDS-PAGE. Purity >95% by SDS-PAGE.
<b>Clonality</b>	Monoclonal

Clone number	4G4AF5
Isotype	IgG1
Light chain type	kappa

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab110283 in the following tested applications.

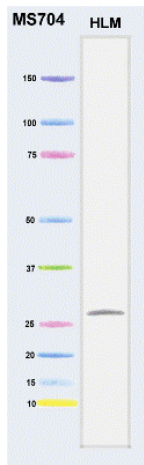
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 26 kDa.
ICC/IF		Use a concentration of 4 µg/ml.
Flow Cyt		Use a concentration of 1 µg/ml. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	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.
<b>Involvement in disease</b>	Note=The enzyme defect in pentosuria has been shown to involve L-xylulose reductase. Essential pentosuria is an inborn error of metabolism characterized by the excessive urinary excretion of the pentose L-xylulose.
<b>Sequence similarities</b>	Belongs to the short-chain dehydrogenases/reductases (SDR) family.
<b>Cellular localization</b>	Membrane. Probably recruited to membranes via an interaction with phosphatidylinositol.

## Images



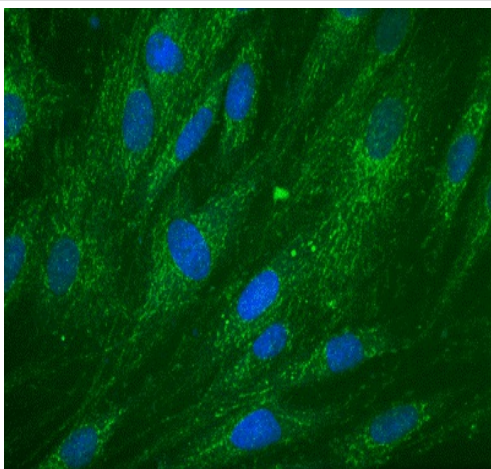
Western blot - Anti-DCXR antibody [4G4AF5] (ab110283)

Anti-DCXR antibody [4G4AF5] (ab110283) at 1 µg/ml + Human liver mitochondria at 20 µg

### Secondary

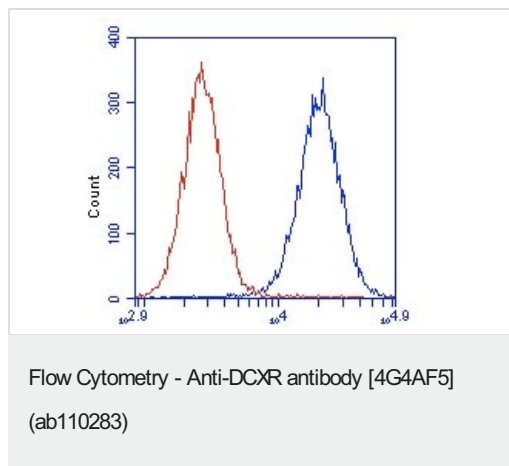
Goat anti-mouse conjugated to AP

**Predicted band size:** 26 kDa



Immunocytochemistry/ Immunofluorescence - Anti-DCXR antibody [4G4AF5] (ab110283)

Immunocytochemistry image of ab110283 stained Human HDFn cells. The cells were paraformaldehyde fixed (4%, 20 min) and Triton X-100 permeabilized (0.1%, 15min). The cells were incubated with ab110283 at 4 µg/ml for 2h at room temperature or over night at 4°C. The secondary antibody was (green) AlexaFluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. 10% Goat serum was used as the blocking agent for all blocking steps. DAPI was used to stain the cell nuclei (blue). Target protein locates mainly in the cell membrane.



HL-60 cells were stained with 1 µg/mL ab110283 (blue) or an equal amount of an isotype control antibody (red) and analyzed by flow cytometry.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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