

# PRODUCT INFORMATION



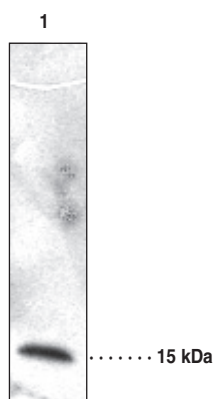
## Cellular Retinol Binding Protein 7 Polyclonal Antibody

Item No. 10010250

### Overview and Properties

<b>Contents:</b>	This vial contains 400 µg of peptide affinity-purified IgG, lyophilized. Resuspend the IgG in 500 µl of purified water prior to use. Buffer will be 1X TBS.
<b>Synonyms:</b>	Cellular Retinol-Binding Protein IV, cRBP7, RET7, Retinoid Binding Protein 7
<b>Immunogen:</b>	Synthetic peptide from human cRBP7 amino acids 125-134 (QVCKQTFQRA)
<b>Cross Reactivity:</b>	(+) Human, mouse, rat, and African green monkey; cRBP7 other species not tested
<b>Form:</b>	Solid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥3 years
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	Immunocytochemistry (ICC) and Western blot (WB); the recommended starting dilution is 1:100 (4 µg/ml) for ICC and 1:200 (2 µg/ml) for WB. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

### Image



Lane 1: Clarified rat heart supernatant (40 µg)

WARNING  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## Description

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Retinol is an essential micronutrient that plays a critical role in various physiological functions including cell growth and differentiation. Due to the instability and low solubility of retinol in the aqueous medium, it requires specific binding proteins in body fluids and within the cell for transport.<sup>1</sup> Cytoplasmic carriers of the retinol molecule, the cellular retinol-binding proteins (cRBPs), are monomeric proteins of about 15 kDa. cRBP7 is the most recently indentified cellular retinol carrier found to be expressed mainly in the kidney, heart, and transverse colon in humans.<sup>2</sup> In addition to the intracellular transport role of cRBP7, further study of this protein is warranted. Cayman's cRBP7 polyclonal antibody detects both the mature protein at about 15 kDa by western blot in tissues/cells such as heart, HEK 293 cells, COS-7 cells, and RAW 264.7 cells. The antibody can also be used for immunocytochemistry.

## References

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1. Noy, N. Retinoid-binding proteins: Mediators of retinoid action. *Biochem J.* **348**(Pt. 3), 481-495 (2000).
2. Folli, C., Calderone, V., Ramazzina, I., *et al.* Ligand binding and structural analysis of a human putative cellular retinol-binding protein. *J. Biol. Chem.* **277**(44), 41970-41977 (2002).

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