bs-3900R **[Primary Antibody]**

CYP2R1 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 120227 **SWISS:** Q6VVX0

Target: CYP2R1

Immunogen: KLH conjugated synthetic peptide derived from human CYP2R1: 251-350/501.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: CYP2R1 is a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are mono-oxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This enzyme is a microsomal vitamin D hydroxylase that converts vitamin D into the active ligand for the vitamin D receptor. Defects in CYP2R1 are a cause of 25-hydroxyvitamin D(3) deficiency, also known as pseudovitamin D(3) deficiency rickets due to 25-hydroxylase deficiency. First described in patients who had rickets at a young age despite a history of adequate vitamin D intake. The patients sera had low calcium concentrations, low phosphate concentrations, elevated alkaline phosphatase activity and low levels of 25-hydroxyvitamin D.

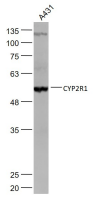
Applications: **WB** (1:500-2000)
Flow-Cyt (2ug/Test)

Reactivity: Human, Mouse (predicted: Rat, Rabbit, Pig, Dog, Horse)

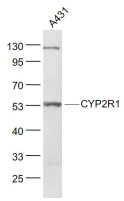
Predicted MW.: 55 kDa

Subcellular Location: Cell membrane ,Cytoplasm

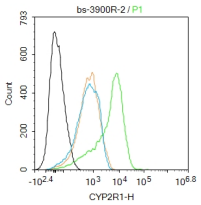
VALIDATION IMAGES



Sample: A431(Human) Cell Lysate at 30 ug Primary: Anti-CYP2R1 (bs-3900R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 55 kD Observed band size: 55 kD



Sample: A431(Human) Cell Lysate at 30 ug Primary: Anti- CYP2R1 (bs-3900R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 55 kD Observed band size: 53 kD



Blank control:Jurkat. Primary Antibody (green line): Rabbit Anti-CYP2R1 antibody (bs-3900R) Dilution: 2ug/Test; Secondary Antibody : Goat anti-rabbit IgG-FITC Dilution: 0.5ug/Test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature.The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature.Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=8.2]** Qingjing Gao. et al. 1,25(OH)$_2$D$_3$ regulates androgen synthesis via transcriptional control of steroidogenic enzymes and LHR in the scented glands of muskrats (Ondatra zibethicus). FREE RADICAL BIO MED. 2025 Mar;229:82 IHC

;Muskrat. 39827922

- **[IF=4.8]** Wenjing Lu. et al. Vitamin D status alters genes involved in ovarian steroidogenesis in muskrat granulosa cells. BBA-MOL CELL BIOL L. 2024 May;1869:159469 IHC ;Muskrat. 38402945
- **[IF=4.285]** Stenhouse Claire. et al. Effects of progesterone and interferon tau on ovine endometrial phosphate, calcium, and vitamin D signaling. Biol Reprod. 2022 Feb;: IHC ;Sheep（Ewe）. 10.1093/biolre/ioac027
- **[IF=4.3]** Xu Jia-Yi. et al. Long noncoding RNA XLOC_006786 inhibits the proliferation, invasion and metastasis of osteosarcoma cells through NOTCH3 signaling pathway by targeting miR-491-5p. HUM CELL. 2023 Aug;:1-12 Other ;. 37573513