bs-2589R **[Primary Antibody]**

CYP1A2 Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1544 **SWISS:** P05177

Target: CYP1A2

Immunogen: KLH conjugated synthetic peptide derived from human CYP1A2: 221-320/513.

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: This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. The protein encoded by this gene localizes to the endoplasmic reticulum and its expression is induced by some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme's endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. Other xenobiotic substrates for this enzyme include caffeine, aflatoxin B1, and acetaminophen. The transcript from this gene contains four Alu region. [provided by RefSeq].sequences flanked by direct repeats in the 3' untranslated.

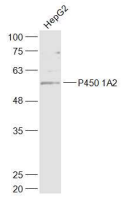
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (0.2ug/test)

Reactivity: Human (predicted: Mouse, Rat)

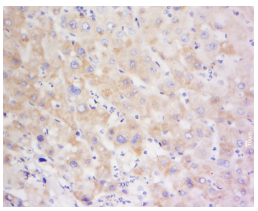
Predicted MW.: 56 kDa

Subcellular Location: Cell membrane ,Cytoplasm

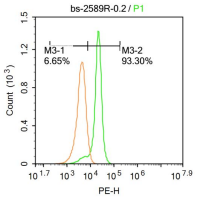
VALIDATION IMAGES



Sample: HepG2(Human) Cell Lysate at 30 ug Primary: Anti-P450 1A2 (bs-2589R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 56 kD Observed band size: 56 kD



Tissue/cell: human liver cancer; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-P450 1A2 Polyclonal Antibody, Unconjugated(bs-2589R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control:Molt-4. Primary Antibody (green line): Rabbit Anti-P450 1A2 antibody (bs-2589R) Dilution: 0.2µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-PE Dilution: 0.2µg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 20% PBST for 20 min at-20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at 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=6.8]** Ruimeng Liu. et al. Protective role of curcumin on broiler liver by modulating aflatoxin B1-induced DNA

methylation and CYPs expression. ECOTOX ENVIRON SAFE. 2023 Jul;260:115086 WB ;Chicken. 37269612

- **[IF=5.923]** Hanyi Hua. et al. The Intervention and Mechanism of Action for Aloin against Subchronic Aflatoxin B1 Induced Hepatic Injury in Rats. Int J Mol Sci. 2021 Jan;22(21):11620 IHC ;Rat. 34769051
- **[IF=4.15]** Jiang, Zhihui, et al. "Development of an IgY Antibody-Based Immunoassay for the Screening of the CYP2E1 Inhibitor/Enhancer from Herbal Medicines." Frontiers in Pharmacology 7 (2016): 502. WB ;Mouse. 28066249
- **[IF=3.54]** Huang, Li, et al. "Reduction of Aflatoxin B1 Toxicity by Lactobacillus plantarum C88: A Potential Probiotic Strain Isolated from Chinese Traditional Fermented Food “Tofu”." PLOS ONE 12.1 (2017): e0170109. WB ;="Mouse". 28129335
- **[IF=2.85]** Cui, Yan, et al. "Evaluating the hepatoprotective efficacy of Aloe vera polysaccharides against subchronic exposure of aflatoxins B 1." Journal of the Taiwan Institute of Chemical Engineers (2017). IHC ;="Mouse". 10.1016/j.jtice.2017.03.040