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Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Anti-CYP1A [CRC4] Standard Size Ab04076-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This is a reformatted human IgG1 Fc Silent Fc Silent™ antibody, based on the original human IgG1 format, created for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: CRC4

Alternative Name(s) of Target: CYP1A1; Cytochrome P450 1A1; Cytochrome P450 1A

UniProt Accession Number of Target Protein: Q8UW07

Published Application(s): WB, ELISA, IHC

Published Species Reactivity: amphibian, Chicken, Fish, Rat, reptile, Human, Mouse

Immunogen: The original antibody was generated by immunizing BALB/c mice with synthetic zebrafish CYP1A peptide (VMEHYDTFDKDNIRDITDSLINHC) conjugated to KLH at the C-terminus cysteine. The resulting hybridomas were re-screened by ELISA against the core sequence (IRDITDSLI) to obtain this antibody.

Specificity: This antibody binds CYP1A (Cytochrome P450 1A) protein of zebrafish. This antibody shows cross-reactivity across vertebrate taxa and is capable of binding CYP1A protein from mouse, human, rat, chicken, fish, amphibians and reptiles. The specific epitope that this antibody recognizes is the amino acid sequence (IRDITDSLI), which is highly conserved among vertebrates. CYP1A is a heme-thiolate monooxygenase enzyme, which is involved in the metabolism of various endogenous substrates, including fatty acids, steroid hormones and vitamins. Human ortholog of this gene implicated in several diseases, including autoimmune hypersensitivity disease, bone inflammation disease, gastrointestinal system cancer, hematologic cancer, and lung disease.

Application Notes: The binding reactivity of this antibody for synthetic peptide containing amino acid sequence 'IRDITDSLI' was determined using ELISA. The binding reactivity of this antibody towards CYP1A protein zebrafish liver cells, *Poeciliopsis lucida* hepatoma cell line, β-NF induced rainbow trout microsomes, mouse hepatoma cell line, rat liver, frog XLK-WG cell line and recombinant CYP1A1 expressed in HEK cells was determined using western blot. This antibody works well in formalin-fixed and paraffin-embedded liver tissues from various vertebrates for immunohistochemistry, as well as whole-mounted zebrafish embryos (PMID: 35878309).

Antibody First Published in: Anderson et al. Development and Applications of a Zebrafish (*Danio rerio*) CYP1A-Targeted Monoclonal Antibody (CRC4) with Reactivity across Vertebrate Taxa: Evidence for a

Conserved CYP1A Epitope. Toxics. 2022 Jul; 10(7): 404. [PMID:35878309](#)

Note on publication: Describes the generation of an antibody that targets a highly conserved epitope of vertebrate CYP1A.

Product Form

Size: 100 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.