



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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## Anti-CYP1A [CRC4] Standard Size Ab04076-23.0

**Isotype and Format:** Rabbit IgG, 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,  $\beta$ -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.