

Anti-Vitellogenin [H4] Bulk Size Ab03474-3.3-BT

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

This full-length reformatted mouse antibody was made using the variable domain sequences of the original Mouse scFv format for improved compatibility with existing reagents assays and techniques.

Isotype and Format: Mouse IgG2b, [Fc Silent™](#), Kappa

Clone Number: H4

Alternative Name(s) of Target: Vtg; Vtg1; VG; Vitellogenin 1

UniProt Accession Number of Target Protein: Q90YN8

Published Application(s): WB, ELISA

Published Species Reactivity: Chinese rare minnow (*Gobiocypris rarus*), common carp (*Cyprinus carpio*), crucian carp (*Carassius auratus*), zebrafish (*Danio rerio*)

Immunogen: The original antibody was isolated from an scFv phage display library generated from the splenic mRNA from 100 non-immunized 6 wk old female BAL b/c mice after three rounds of panning.

Specificity: This antibody binds a linear epitope of vitellogenin (Vtg) at the N-terminal region of the protein from zebrafish, Chinese rare minnow, common carp and crucian carp. In female oviparous animals, vitellogenin (Vtg), the phospholipoglycoprotein precursor to the major egg yolk protein, is synthesized in the liver in response to endogenous estrogen. Vtg synthesis in males can be used as a biomarker for exposure to estrogen and estrogen mimics in males where Vtg levels are normally low but can be increased upon exposure.

Application Notes: The scFv version of this antibody can bind vitellogenin (Vtg) from various cyprinid fish species like zebrafish, Chinese rare minnow and common carp in an ELISA. This antibody can also recognize denatured 28a-VI polypeptide in western blotting. This antibody was used in the analysis of Vtg in plasma samples from zebrafish exposed to a range of concentrations of 17 α -ethynyl estradiol (EE2). This antibody can be used in ELISA to measure Vtg in serum samples from common carp, zebrafish and rare minnow with similar binding specificities and sensitivities. The sensitivity of detection for this antibody was found to be 50 ng Vtg/ml (PMID: 21290899).

Antibody First Published in: Rao et al. Novel recombinant monoclonal antibodies for vitellogenin assays in cyprinid fish species. *Dis Aquat Organ*. 2010 Dec 7;93(1):83-91. [PMID:21290899](#)

Note on publication: Describes the production of H4 scFv from a phage display library and the characterization of the scFv by ELISA and WB to determine binding specificity and binding curves.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.