

## Anti-Zearalenone [QY1.5] Standard Size Ab02930-23.0

This full-length chimeric rabbit 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:** Rabbit IgG, Kappa

Clone Number: 0Y1.5

Alternative Name(s) of Target: RAL; F-2 toxin; F-2 mycotoxin; Mycotoxin F2; [6-(10-hydroxy-6-oxo-trans-

1-undecenyl)-bresorcylic acid lactone]; CAS NO: 17924-92-4; ChEBI:10106

**UniProt Accession Number of Target Protein:** 

Published Application(s): ELISA

Published Species Reactivity: Fusarium species

**Immunogen:** The original antibody was generated using phage display technology by panning an scFv library against zearalenone-ovalbumin conjugate. The scFv library was created by linking the heavy and light chain genes of antizearalenone hybridoma cell line (2G3-6E3-2E2) using DNA linker encoding peptide (Gly4Ser)3 and cloning into a phagemid (pCANTAB5E) to be expressed as a fusion protein on the surfaces of recombinant phages. The original hybridoma (2G3-6E3-2E2) was generated using zearalenone-BSA conjugate as an immunogen.

**Specificity:** This antibody is specific for zearalenone and show some cross reactivity with hydroxylated zearalenone analogs. It is a mycotoxin produced mainly by fungi belonging to the genus Fusarium in foods and feeds. Possess estrogenic activity in pigs, cattle and sheep, with low acute toxicity. When fed to animals, the compound causes hypoestrogenism with symptoms such as enlargement of the uterus and nipples, vulvar swelling, vaginal prolapse, and infertility

**Application Notes:** The binding specificity of this scFv antibody towards mycotoxin zearalenone was determined using ELISA. The scFv version of this antibody was also able to detect zearalenone in spiked corn extract in a competitive-indirect ELISA (PMID: 8979354).

**Antibody First Published in:** Yuan et al. Molecular cloning, expression, and characterization of a functional single-chain Fv antibody to the mycotoxin zearalenone. Appl Environ Microbiol. 1997 Jan;63(1):263-9. PMID:8979354

**Note on publication:** Describes the generation of a functional scFv antibody having specificity for mycotoxin zearalenone using phage display technology.

## **Product Form**

**Size:** 200 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.