



# 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-domoic acid [2H12] Bulk Size Ab04145-23.0-BT

**Isotype and Format:** Rabbit IgG, Kappa

**Clone Number:** 2H12

**Alternative Name(s) of Target:** DA; (2S,3S,4S)-4-[(2Z,4E,6R)-6-Carboxyhepta-2,4-dien-2-yl]-3-(carboxymethyl)pyrrolidine-2-carboxylic acid

**UniProt Accession Number of Target Protein:**

**Published Application(s):** ELISA

**Published Species Reactivity:** Specie independent

**Immunogen:**

**Specificity:** The antibody is specific for domoic acid. Domoic acid is a kainic acid-type neurotoxin that causes amnesic shellfish poisoning. It is produced by algae and accumulates in shellfish, sardines, and anchovies. When sea lions, otters, cetaceans, humans, and other predators eat contaminated animals, poisoning may result.

**Application Notes:** The specificity of the original format and the scFv format of the antibody was confirmed by ELISA analysis (IC<sub>50</sub> = 1 µg/ml and 245 ng/ml respectively and K<sub>d</sub> = 0.8 µM for the scFv fragment) (Hu et al., 2005; PMID: 16019098). The scFv was employed for the development of a novel immunosensor for in situ domoic acid screening, where the fragment was immobilized on mesoporous silica. Domoic acid binding analysis found that the adsorbed scFv bound domoic acid in a concentration-dependent manner (Hu et al., 2007; PMID: 17005419). The scFv antibody fragment was engineered with cysteine-containing linkers of two different lengths. The domoic acid detection ability of the covalently immobilised antibody fragments was compared with that of scFvs adsorbed non-covalently onto polystyrene plates. The IC<sub>50</sub> for DA of the unmodified scFv in solution was previously reported as 245 ng/mL whereas in this study, the scFv, 2H12 scFv-cys I and 2H12 scFv-cys II proteins adsorbed onto standard Maxisorp plates were calculated to have IC<sub>50</sub>s for DA of 540 ng/mL, 1126 ng/mL and 1482 ng/mL, respectively, as measured by Competitive ELISA ( Hortigüela et al., 2013; PMID: 23493076).

**Antibody First Published in:** Hu et al. Cloning, expression and characterisation of a single-chain Fv antibody fragment against domoic acid in *Escherichia coli* J Biotechnol. 2005 Oct 17;120(1):38-45. doi: 10.1016/j.jbiotec.2005.05.018. Epub 2005 Jul 12. [PMID:16019098](#)

**Note on publication:** The original paper describes the cloning, expression and characterization of a single chain Fv antibody from a mouse hybridoma cell line.

## 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.