



# 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-paraoxon (organophosphate) [A.17 L47K] Bulk Size Ab04213-23.0-BT

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

**Clone Number:** A.17 L47K

**Alternative Name(s) of Target:** L-Leu47Lys; A17 L47K; POX

**UniProt Accession Number of Target Protein:**

**Published Application(s):** Catalyzation, crystallization

**Published Species Reactivity:** Species independent

**Immunogen:** The original antibody was generated via phage display from the Griffin.1 library by panning against reactive phosphonate ester 1.

**Specificity:** This antibody is specific for paraoxon.

**Application Notes:** This antibody is a covalent trap for Paraoxon and other organophosphate substrates, catalyzing the hydrolysis reaction through the  $S_N2$  mechanism. The catalytic parameters of this antibody were measured, and its  $K_D$  was found to be  $170 \pm 8 \mu\text{M}$ ; it exhibited a 340-fold reactivity enhancement for paraoxon relative to wild-type Ig-paraoxonase. Furthermore, its crystal structure in complex with paraoxon was determined (Mokrushina et al., 2020; PMID: 32859757).

**Antibody First Published in:** Mokrushina et al. Multiscale computation delivers organophosphorus reactivity and stereoselectivity to immunoglobulin scavengers Proc Natl Acad Sci U S A. 2020 Sep 15;117(37):22841-22848. doi: 10.1073/pnas.2010317117. Epub 2020 Aug 28 [PMID:32859757](#)

**Note on publication:** The original publication explores the enhancement of immunoglobulin (Ig) catalytic activity against organophosphorus toxins through quantum mechanics/molecular mechanics (QM/MM) maturation.

### 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.