



# 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

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## Anti-RNA hairpin [BL3-6S97N] Bulk size M Ab03300-10.29BS

This is a Fab fragment with His tag.

**Isotype and Format:** Human Fab fragment, His-Tagged, Kappa

**Clone Number:** BL3-6S97N

**Alternative Name(s) of Target:**

**UniProt Accession Number of Target Protein:**

**Published Application(s):** crystallization

**Published Species Reactivity:** Species independent

**Immunogen:** A library of Fabs was generated by rationally varying the composition of the residues in complementarity determining regions (CDRs) of Fab BL3-6. Subsequently, the Fab library was challenged in a phage display selection to recognize and bind the GAAACAC motif.

**Specificity:** The antibody binds to the RNA hairpins GAAACAC hairpin. An RNA hairpin is an essential secondary structure of RNA. It can guide RNA folding, determine interactions in a ribozyme, protect messenger RNA (mRNA) from degradation, serve as a recognition motif for RNA binding proteins or act as a substrate for enzymatic reactions.

**Application Notes:** The Fab was generated by directed mutagenesis from the parental Fab BL3-6. The S97N mutation in complementarity determining region L3 of the Fab improved the binding affinity compared to the parent Fab BL3-6 ( $K_d = 5$  nM). The Fab fragment also bound to the affinity matured GAGACCC hairpin. The crystal structure of the Spinach RNA grafted with GAAACAC loop in complex with Fab BL3-6S97N was determined (Koirala et al., 2018; PMID: 29309709).

**Antibody First Published in:** Koirala et al. Affinity maturation of a portable Fab-RNA module for chaperone-assisted RNA crystallography *Nucleic Acids Res.* 2018 Mar 16;46(5):2624-2635. [PMID:29309709](#)

**Note on publication:** The original paper describes the use of Fab fragment as chaperone for RNA crystallography.

### Product Form

**Size:** 1 mg Purified antibody in bulk size.

**Purification:** Purified by Immobilized Metal Affinity Chromatography

**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:** See vial label

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.