dynamic BIOSENSORS AS-1-Rb v5.1 Adapter Strand User Manual

Contents

1 dynamic BIOSENSORS AS-1-Rb v5.1 Adapter Strand
2 Product Usage Instructions
3 Key Features
4 Product Description
5 Preparation | MIX&RUN
6 Documents / Resources
6.1 References
7 Related Posts

dynamic
BIOSENSORS

dynamic BIOSENSORS AS-1-Rb v5.1 Adapter Strand

Specifications

- **Product Name:** heliX+ ADAPTER STRAND 1 with red dye Rb
- **Manufacturer:** Dynamic Biosensors GmbH & Inc.
- **Order Number:** AS-1-Rb
- **Key Features:** 2 spots with 2 different anchor sequences for DNA-encoded addressing
- **Concentration:** 400 nM
- **Storage:** Black cap, limited shelf life, avoid freeze-thaw cycles, aliquot the nanolever

Product Usage Instructions

Preparation | MIX&RUN

1. Mix Adapter strand 1 – Rb (400 nM) and conjugated Ligand strand (500 nM) at 1:1 ratio (v/v).
2. Incubate the solution from step 1 at room temperature at 600 rpm for 30 minutes for complete hybridization.
3. Mix the solution from step 2 with Adapter strand 1 – Rb – lfs (200 nM) at 1:1 ratio (v/v).
4. The solution is now ready for biochip functionalization.

Note: Stability of the solution is dependent on the stability of the ligand molecule.

FAQs

- **Q: What is the concentration of Adapter strand 1 – Rb – lfs?**
  A: The concentration is 200/250 nM as per the product description.
- **Q: Can Adapter strand 2 be used interchangeably with Adapter strand 1?**
  A: No, Adapter strand 2 with red dye Rb is prehybridized with ligand-free strand and has a different order number (HK-NHS-1 AS-2-Rb-lfs).

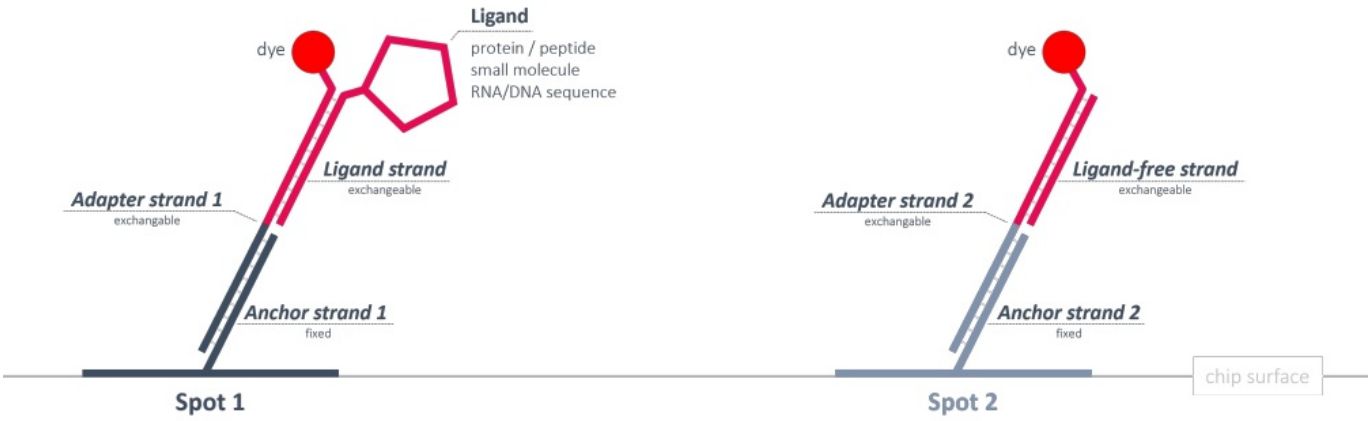
heliX+
User Manual

ADAPTER STRAND 1
with red dye Rb
Dynamic Biosensors GmbH & Inc.
AS-1-Rb v5.1

Key Features

- Adapter strand 1 – Rb for functionalization of heliX® Adapter Chip Spot 1.
- Compatible with heliX® Adapter Chip.
- Includes Adapter strands for 50 regenerations.
- Ideal for MIX&RUN sample preparation.
- Adapter strand 1 carries a moderately hydrophilic red dye (Rb) with a neutral net charge.

heliX® Adapter Chip Overview
2 spots with 2 different anchor sequences for DNA-encoded addressing.



Product Description

Order Number: AS-1-Rb
Table 1. Contents and Storage Information

Material	Cap	Concentration	Amount	Buffer	Storage
Adapter strand 1 – Rb	Black	400 nM	5 x 100 µL	TE40 [1]	-20°C

For research use only.

- This product has a limited shelf life, please see expiry date on label.
- To avoid many freeze thaw cycles please aliquot the nanolever

Preparation | MIX&RUN

In-solution hybridization of adapter and ligand strands:

1. Mix Adapter strand 1 – Rb (400 nM) and conjugated Ligand strand (500 nM) at 1:1 ratio (v/v).
2. Incubate the solution of step 1 at RT at 600 rpm for 30 min to ensure complete hybridization.
3. Mix solution of step 2 and Adapter strand 1 – Rb – lfs (200 nM) at 1:1 ratio (v/v). Solution is ready to use for biochip functionalization. Stability of the solution is related to the stability of the ligand molecule

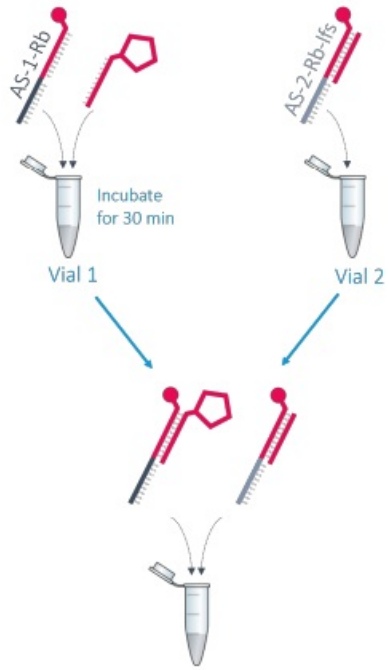


Table 2. Additional material for functionalization of spot 1 and reference spot 2.

Material	Concentration	Buffer	Related Product Name	Order No
Ligand strand carrying the conjugated ligand	500 nM	P**2**] E40 [	**heliX®** Amine Coupling Kit 1	HK-NHS-1
Adapter strand 1 – Rb – lfs	200/250 nM	TE40 [**1**]	***Adapter strand 2*** with red dye **Rb** pr ehybridized with *ligand-free strand*	AS-2-Rb-lf s

Example
Required volume for 3 functionalizations: 100 µL with a final concentration of 100 nM.

Vial 1		Vial 2
Adapter strand 1 – Rb (400 nM)	Conjugated ***Ligand strand*** (500 n M)	***Adapter strand 1 – Rb – lfs*** (200/2 50 nM)
25 µL	25 µL	50 µL

After incubation time, mix vial 1 and vial 2 to obtain 100 µL of ready-to-use DNA solution.

Contact
Dynamic Biosensors GmbH

- Perchtinger Str. 8/10
- 81379 Munich
- Germany

Dynamic Biosensors, Inc.

- 300 Trade Center, Suite 1400
- Woburn, MA 01801
- USA

Order Information **order@dynamic-biosensors.com**
Technical Support **support@dynamic-biosensors.com**

www.dynamic-biosensors.com

1. TE40: 10 mM Tris, 40 mM NaCl, 0.05 % Tween20, 50 µM EDTA, 50 µM EGTA
2. If the protein is not stable in PE40 (TE40, HE40), please check buffer compatibility with the switchSENSE® compatibility sheet.

www.dynamic-biosensors.com

Documents / Resources

	**dynamic BIOSENSORS AS-1-Rb v5.1 Adapter Strand** [pdf] User Manual AS-1-Rb, AS-2-Rb-lfs, AS-1-Rb v5.1 Adapter Strand, AS-1-Rb v5.1, Adapter Strand, Strand

References

- **HomePage | Biosensors International Ltd**
- **Home - Dynamic Biosensors**
- **Home - Dynamic Biosensors**
- **User Manual**