dynamic BIOSENSORS heliX plus Adapter Strand 1 User Manual

Contents

dynamic BIOSENSORS

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Specifications:

- Product Name: heliX+
- Model: ADAPTER STRAND 1 with red dye Ra
- Manufacturer: Dynamic Biosensors GmbH & Inc.
- Order Number: AS-1-Ra
- Concentration: 400 nM
- Storage: Black cap, Buffer TE40
- For research use only

Product Description:

The heliX+ ADAPTER STRAND 1 is designed with red dye Ra and features 2 spots with 2 different anchor sequences for DNA-encoded addressing. It comes in a concentration of 400 nM and is intended for research purposes.

Usage Instructions:
Preparation | MIX&RUN:

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

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

FAQ:

1. **Q: What is the shelf life of the heliX+ ADAPTER STRAND 1?**

   A: The product has a limited shelf life, please refer to the expiry date on the label.
2. **Q: Can the heliX+ ADAPTER STRAND 1 be frozen?**

   A: To avoid many freeze-thaw cycles, it is recommended to aliquot the nanolever.

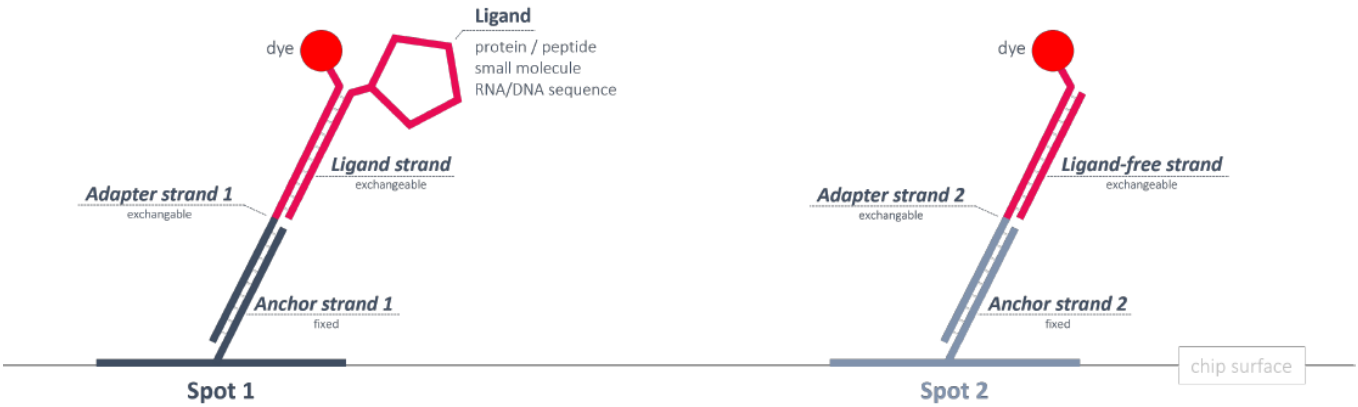
heliX+
User Manual

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

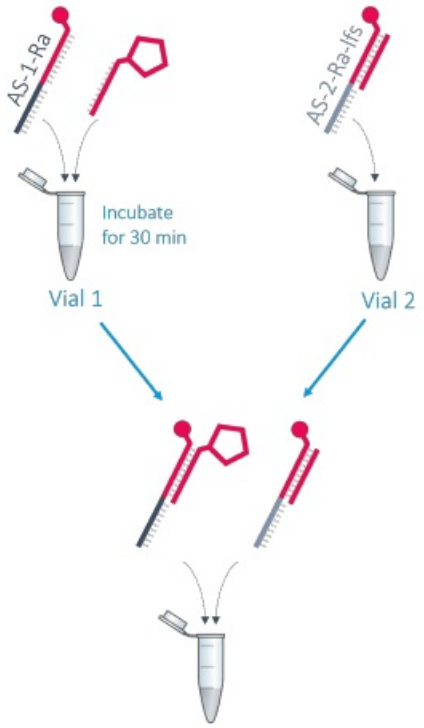


Table 2. Additional material for functionalization of spot 1 and reference spot 2.

Material	Concentration	Buffer	Related Product Name	Order No
Ligand strand carrying the conjugated ligand	500 nM	P2] 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 nM)	***Adapter strand 1 – Rb – lfs*** (200/250 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.

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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 heliX plus Adapter Strand 1** [pdf] User Manual AS-1-Ra, AS-2-Ra-lfs, heliX plus Adapter Strand 1, heliX plus, Adapter Strand 1, Strand 1

References

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