dynamic BIOSENSORS
AS-2-Ra v5.1 Adapter Strand

dynamic BIOSENSORS AS-2-Ra v5.1 Adapter Strand User Manual

Contents

dynamic BIOSENSORS

dynamic BIOSENSORS AS-2-Ra v5.1 Adapter Strand

Product Information

Specifications:

- **Product Name:** heliX+ ADAPTER STRAND 2 with red dye Ra
- **Manufacturer:** Dynamic Biosensors GmbH & Inc.
- **Order Number:** AS-2-Ra
- **Key Features:** 2 spots with 2 different anchor sequences for DNA-encoded addressing

Product Description:
This product contains Adapter strand 2 – Ra with a concentration of 400 nM. It is for research use only and has a limited shelf life. Please see the expiry date on the label. To avoid multiple freeze-thaw cycles, it is recommended to aliquot the nanolever.

Preparation

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

The stability of the solution is dependent on the stability of the ligand molecules.

FAQ:

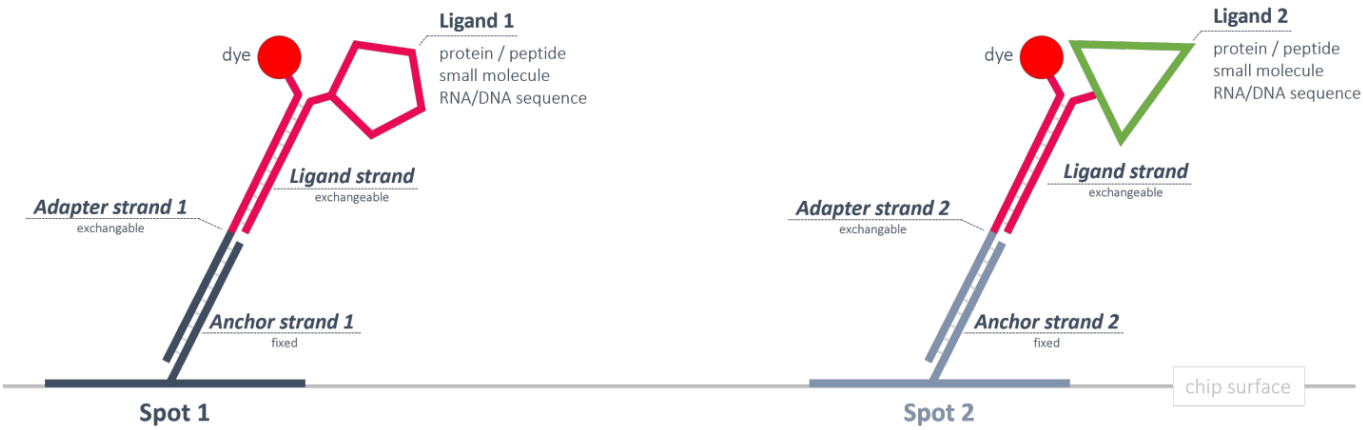
- **Q: Can I use this product for clinical purposes?**
  A: No, this product is for research use only.
- **Q: How should I store the product?**
  A: Store as per the storage information provided on the label. Avoid multiple freeze-thaw cycles. www.dynamic-biosensors.com

Key Features

- Adapter strand 2 for functionalization of heliX® Adapter Chip Spot 2.
- Compatible with heliX® Adapter Chip.
- Includes Adapter strands for 50 regenerations.
- Ideal for MIX&RUN sample preparation.
- Adapter strand 2 carries a moderately hydrophilic red dye (Ra) with a single positive net charge.

heliX® Adapter Chip Overview

2 spots with 2 different anchor sequences for DNA-encoded addressing.



Product Description

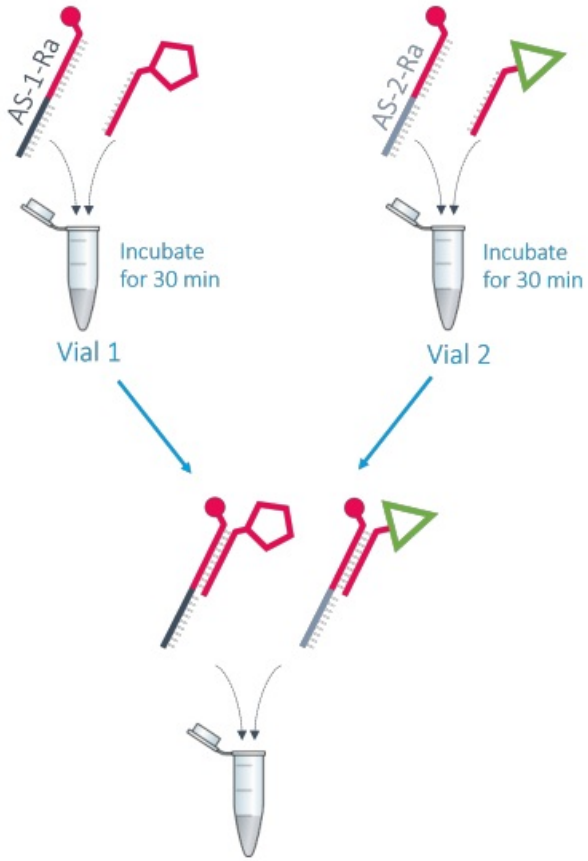
Order Number: AS-2-Ra
Table 1. Contents and Storage Information

Material	Cap	Concentration	Amount	Buffer	Storage
Adapter strand 2 – Ra	White	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 – Ra (400 nM) and conjugated Ligand strand with ligand 1 (500 nM) at 1:1 ratio (v/v).
2. Mix Adapter strand 2 – Ra (400 nM) and conjugated Ligand strand with ligand 2 (500 nM) at 1:1 ratio (v/v).
3. Incubate separately the two solutions of step 1 and 2 at RT at 600 rpm for 30 min to ensure complete hybridization.
4. Mix solution of step 1 and 2 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 molecules.

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

Material	Concentration	Buffer	Related Product Name	Order No
Adapter strand 1 – Ra	400 nM	TE40 [**1**]	***Adapter strand 1*** with red dye **Ra**	AS-1-Ra
Ligand strand carrying the conjugated ligand 1	500 nM	P**2**] E40 [	**heliX®** Amine Coupling Kit 1	HK-NHS-1
Ligand strand carrying the conjugated ligand 2	500 nM	PE40 [**2**]	**heliX®** Amine Coupling Kit 1	HK-NHS-1

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

Vial 1		Vial 2	
Adapter strand 1 – Ra (400 nM)	Conjugated ***Ligand strand*** with ligand 1 (500 nM)	***Adapter strand 2 – Ra*** (400 nM)	Conjugated ***Ligand strand*** + with ligand 2 (500 nM)
25 µL	25 µL	25 µL	25 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
Instruments and chips are engineered and manufactured in Germany.

TE40: 10 mM Tris, 40 mM NaCl, 0.05 % Tween20, 50 µM EDTA, 50 µM EGTA
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-2-Ra v5.1 Adapter Strand [pdf] User Manual AS-2-Ra v5.1, AS-2-Ra v5.1 Adapter Strand, Adapter Strand, Strand

References

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