

# dynamic BIOSENSORS ASP-1-Ra Adapter Strand Package **User Manual**

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### **ADAPTER STRAND PACKAGE**

with red dye Ra Dynamic Biosensors GmbH & Inc. ASP-1-Ra v5.1



# **Key Features**

- Adapter strand 1 Ra and Adapter strand 2 Ra Ifs (ligand free strand) for functionalization of heliX®
   Adapter Chip on Spot 1 and Spot 2, respectively.
- Compatible with heliX® Adapter Chip.
- Includes Adapter strands for 50 regenerations.
- Ideal for MIX&RUN sample preparation.
- Adapter strands 1 and 2 carry 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: ASP-1-Ra

Table 1. Contents and Storage Information

Material	Сар	Concentration	Amount	Buffer	Storage
Adapter strand 1 – Ra	Black	400 nM	5 x 100 μL	TE40 [1]	-20°C
Adapter strand 2 – Ra – Ifs	White	200/250 nM	5 x 200 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 (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 2 Ra Ifs (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.

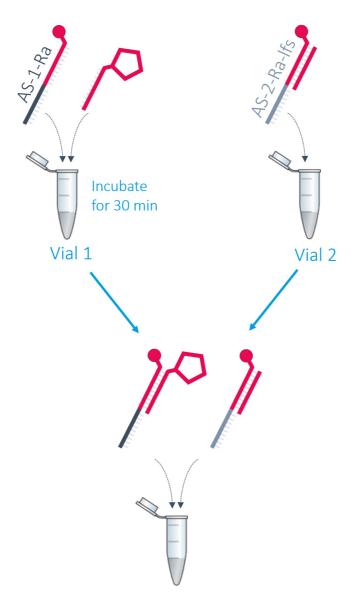


Table 2. Additional material for functionalization of spot 1 and reference spot 2.

Material	Concentration	Buffer	Related Product Name	Order No
Ligand strand carrying the c onjugated ligand	500 nM	PE40 [2]	heliX® Amine Coupling Ki t 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 (500 nM)	Adapter strand 2 - Ra - Ifs (200/250 n M)
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

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[1] TE40: 10 mM Tris, 40 mM NaCl, 0.05 % Tween20, 50  $\mu$ M EDTA, 50  $\mu$ M EGTA [2] If the protein is not stable in PE40 (TE40, HE40), please check buffer compatibility with the switchSENSE® compatibility sheet. ASP-1-Ra v5.1

www.dynamic-biosensors.com

#### **Documents / Resources**



dynamic BIOSENSORS ASP-1-Ra Adapter Strand Package [pdf] User Manual ASP-1-Ra, ASP-1-Ra v5.1, ASP-1-Ra Adapter Strand Package, ASP-1-Ra, Adapter Strand Package, Strand Package

## References

- Biosensors International Ltd

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