# dynamic BIOSENSORS

# Adapter strand 1

with red dye Ra

Dynamic Biosensors GmbH & Inc. AS-1-Ra v5.1



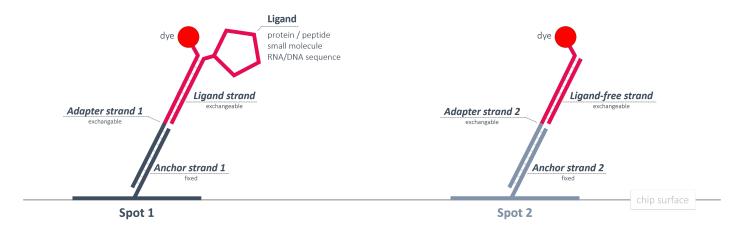


# **Key Features**

- Adapter strand 1 Ra for functionalization of heliX<sup>®</sup> Adapter Chip Spot 1.
- Compatible with **heliX**<sup>®</sup> Adapter Chip.
- Includes Adapter strands for 50 regenerations.
- Ideal for **MIX&RUN** sample preparation.
- Adapter strand 1 carries a moderately hydrophilic red dye (Ra) with a single positive net charge.

## heliX<sup>®</sup> Adapter Chip Overview

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



### **Product Description**

Order Number: AS-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

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.

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# 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 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.

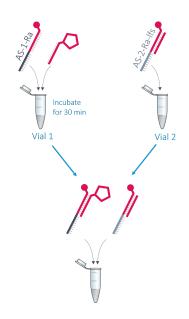


Table 2. Additional material for functionalization of spot 1 and reference spot 2.

Material	Concentration	Buffer	Related Product Name	Order No
<i>Ligand strand</i> carrying the conjugated ligand	500 nM	PE40 <sup>[2]</sup>	<b>heliX</b> <sup>®</sup> Amine Coupling Kit 1	HK-NHS-1
Adapter strand 2 - Ra - lfs	200/250 nM	TE40 <sup>[1]</sup>	<b>Adapter strand 2</b> with red dye <b>Ra</b> prehybridized with <i>ligand-free strand</i>	AS-2-Ra-lfs

### Example

Required volume for 3 functionalizations: **100**  $\mu$ L with a final concentration of **100** nM.

Vial 1	Vial 2	
<b>Adapter strand 1 - Ra</b> (400 nM)	Conjugated <i>Ligand strand</i> (500 nM)	<b>Adapter strand 2 - Ra - Ifs</b> (200/250 nM)
25 μL	25 μL	50 μL

After incubation time, mix vial 1 and vial 2 to obtain 100  $\mu$ L 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.