dynamic BIOSENSORS

Adapter strand 2

with red dye Ra

Dynamic Biosensors GmbH & Inc. AS-2-Ra v5.1



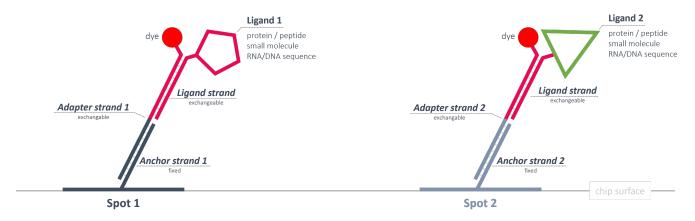


Key Features

- 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	Сар	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.

AS-2-Ra v5.1

Preparation | MIX&RUN

In-solution hybridization of adapter and ligand strands:

- Mix Adapter strand 1 Ra (400 nM) and conjugated Ligand strand with ligand 1 (500 nM) at 1:1 ratio (v/v).
- 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.

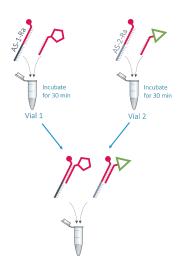
Material	Concentration	Buffer	Related Product Name	Order No
Adapter strand 1 - Ra	400 nM	TE40 ^[1]	Adapter strand 1 with red dye Ra	AS-1-Ra
<i>Ligand strand</i> carrying the conjugated ligand 1	500 nM	PE40 ^[2]	heliX [®] Amine Coupling Kit 1	HK-NHS-1
<i>Ligand strand</i> carrying the conjugated ligand 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 <i>Ligand strand</i> with ligand 1 (500 nM)	Adapter strand 2 - Ra (400 nM)	Conjugated <i>Ligand strand</i> + 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

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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.