

## NTA kit 1

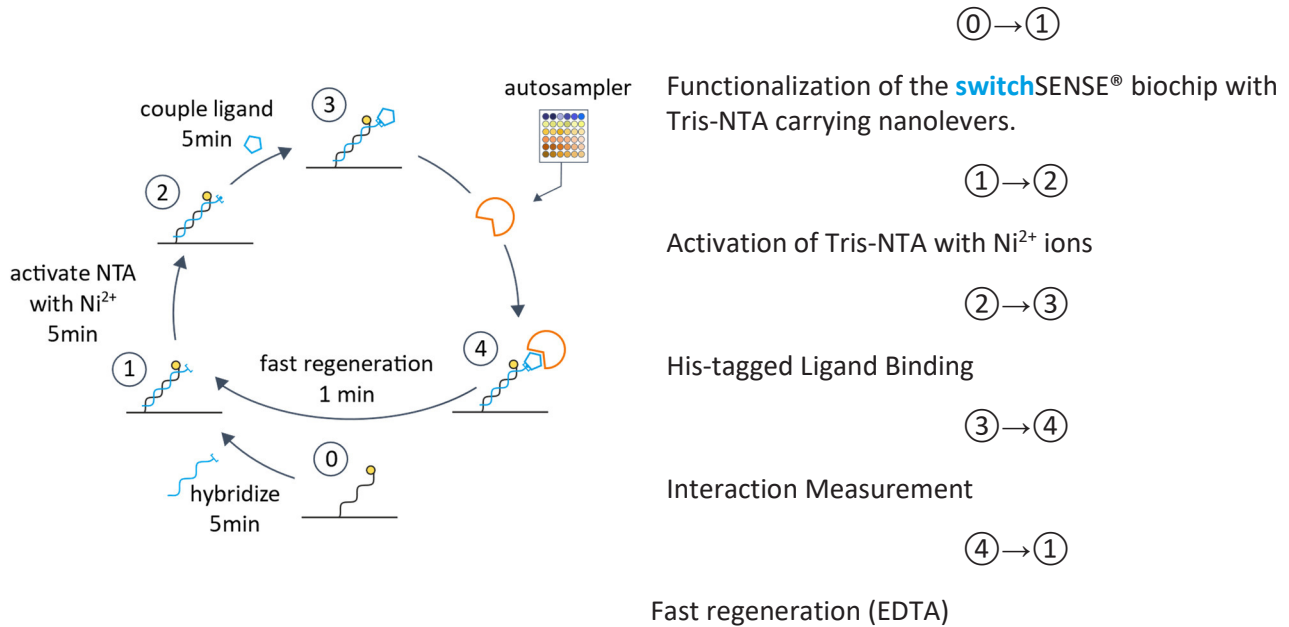
Tris-NTA reagents for capturing His-tagged molecules with B96mer

### Key Features

- Capturing of His-tagged peptides and proteins
- Compatible with all **switch**SENSE® *Multi-purpose biochips* carrying sequence A96 and B96
- Suitable for parallel measurements via DNA encoded addressing
- Includes reagents for 20 x 10 functionalizations

## Workflow Overview

### Workflow Overview with Tris-NTA nanolevers – normal regeneration



## Important Notes

- **Note:** His-tagged proteins slowly dissociate from Tris-NTA. Hence, very slow dissociations ( $k_{OFF} < 1E-3s^{-1}$ ) cannot be measured with this set-up.
- For fast regeneration the surface will be regenerated by washing with 100 mM EDTA to remove the His-tagged protein but keep the Tris-NTA.
- For more information please email to [support@dynamic-biosensors.com](mailto:support@dynamic-biosensors.com).

## Product Description

Order Number **CK-TN-1-B96** (nanolever sequence B96)

TABLE 1 | Contents and storage information

Material	Cap	Amount	Storage	Comment
cNL-A96 (400 nM in TE40 <sup>1</sup> )	yellow	4 x 100 µL	-20°C	
cNL-B96-NTA (400 nM in TE40 <sup>1</sup> )	red	20 x 20 µL	-20°C	
EDTA solution (100 mM)	trans- parent	5 x 1.5 mL	-20°C	
Loading solution	trans- parent	5 x 1.5 mL	-20°C	

For *in vitro* use only.

Please check date of expiry on the kit. Products are shipped at ambient temperature.  
The kit contains reagents sufficient for 20 new hybridizations and 200 fast regenerations.

<sup>1</sup> 10 mM Tris, 40 mM NaCl, 0.05 % Tween20, 50 µM EDTA, 50 µM EGTA

## Assay Setup in switchBUILD

### Setup a Kinetic Experiment with His-tag Capture

#### Properties Autosampler

Immobilization:  ⓘ

Measurement:  ⓘ

Ligand:  Concentration:  nM Mol. Weight:  kDa

Tagged:  Concentration:  nM Mol. Weight:  kDa

Analyte:  Mol. Weight:  kDa

Capture:

**Predicted Interaction** (between 'His-tagged protein' and 'Analyte')

$K_D$ :  M

$k_{ON}$ :   $M^{-1} \cdot s^{-1}$

$k_{OFF}$ :   $s^{-1}$

**Experimental Parameters**

Associate:  concentrations, starting from  M with subsequent concentrations diluted by a factor

Association volume:   $\mu l$  with   $\mu l/min$  for  min with blank run  ⓘ

Dissociation volume:   $\mu l$  with   $\mu l/min$  for  min with blank run

Temperature:   $^{\circ}C$

#### Measurement Spots

Association:  1  2  3  4  5  6

Stopped Flow:  1  2  3  4  5  6

Dissociation:  1  2  3  4  5  6

with Regenerations:  ⓘ

perform as Sizing:  ⓘ

only last concentration:  ⓘ

1) Select "His-tag Capture" as immobilization method.

→ The ligand will automatically update to cNL-B96-NTA.

2) Enter the name and concentration of the his-tagged protein.

3) Set up the interaction of interest in the "Interaction" tab.

4) When "with regeneration" is tagged, an EDTA regeneration will be performed removing the his-tagged protein from the surface. This is followed by a re-activating the NTA surface and immobilization of fresh ligand protein.

## My Notes

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## Contact

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### Order Information

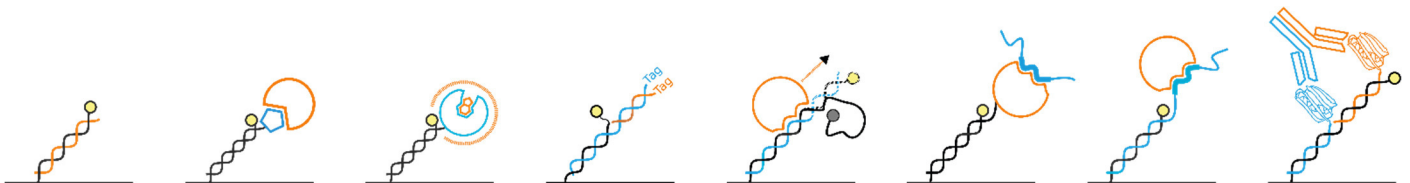
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**switchSENSE®** is a proprietary measurement technology by Dynamic Biosensors GmbH.  
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