Drugging the "undruggables"

Overcome the challenge of analyzing small molecules that inhibit or stabilize protein-protein interactions

Create **Homo- or Hetero-protein immobilization** on the biosensor surface.

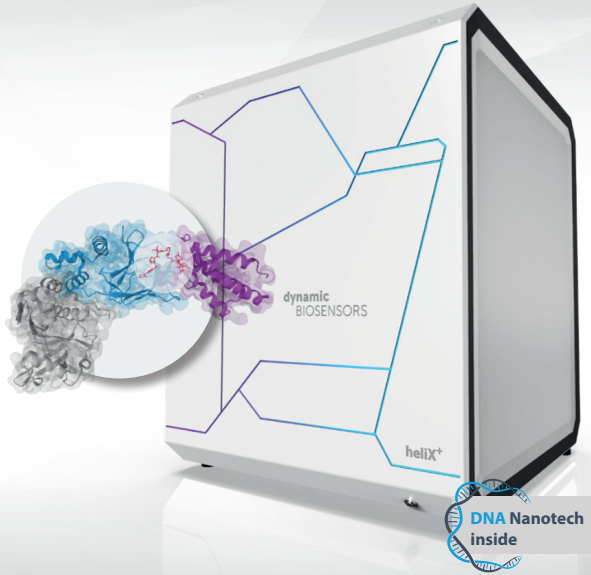
Hit screening of compounds that interfere in PPIs, such as PROTACs, molecular glues and more.

Use **FRET or standard fluorescence change** to measure the interaction.

Highly sensitive for **detecting weak and tight binders**.

Low sample consumption.

dynamic BIOSENSORS

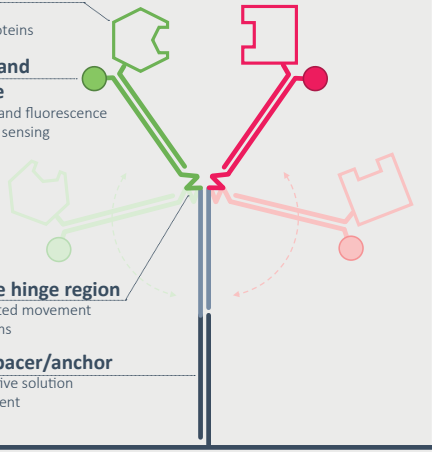


The DNA Y-structure

Interactants on a leash

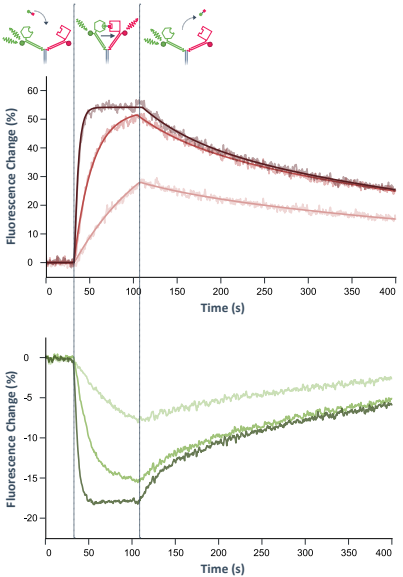
Proteins of interest
Homo- or heteroproteins

Green and red dye
For FRET and fluorescence proximity sensing



Flexible hinge region
Unrestricted movement of the arms

Long spacer/anchor
Quasi-native solution environment



Analysis of the binding kinetics of a small molecule (PROTAC) inducing targeted protein degradation. Simultaneous binding of the PROTAC to a ligase and a target protein causes the formation of a ternary complex and thereby induces red fluorescence due to FRET.

Analyze ternary complex formation vs binary interactions

The Y-structure closes upon small molecule binding, and the subsequent **ternary complex formation** brings together the **green donor** and the **red acceptor** dye into a closer, FRET sensitive, distance. The change in red fluorescence signal intensity directly correlates with ternary complex formation kinetics.

For further information and application examples, visit our website www.**dynamic-biosensors**.com