

R&D funding:

Quality Management



NP_01.pdf

molecular

CYCLE®
diagnostics

dna

Custom
oligonucleotides

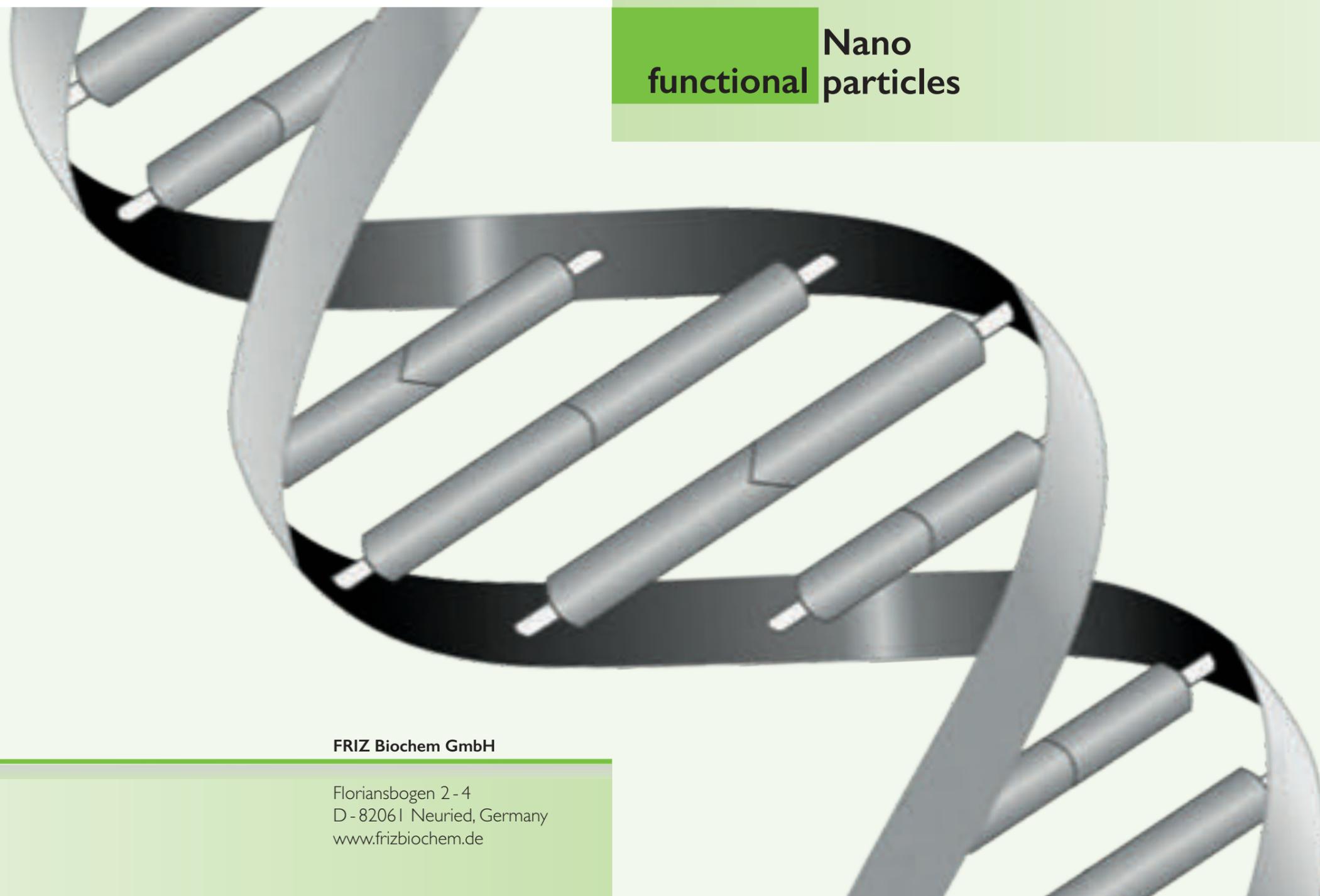
dtpa

Dithiol
phosphoramidite

functional

Nano
particles

functional Nano particles



FRIZ Biochem GmbH

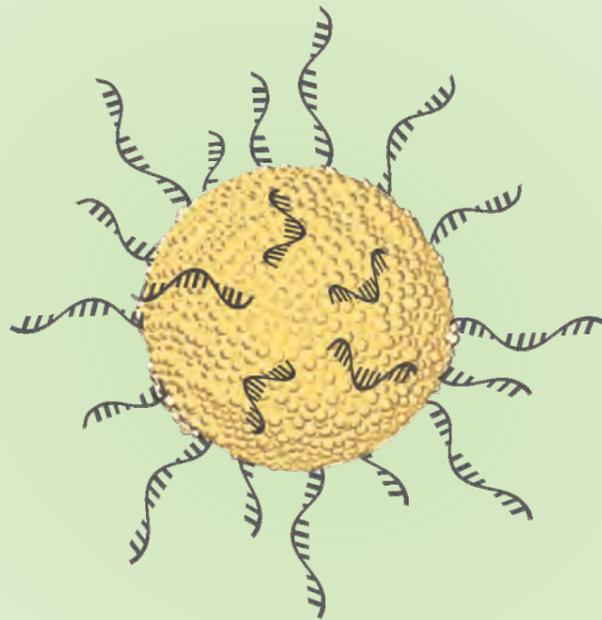
Floriansbogen 2-4
D - 82061 Neuried, Germany
www.frizbiochem.de

frizbiochem.de

FRIZ Biochem GmbH, founded in 2004, is a privately held biotech company located in Neuried near Munich. Our team, focused on advanced electronic biochips and molecular diagnostics, is knowledge driven and dedicated to provide superior solutions. Direct electrical detection of molecular recognition processes forced us to establish a proprietary anchoring of molecular probes on metal surfaces via DTPA (dithiophosphoramidite, US7601848, EP1626952).

This DTPA anchoring chemistry allows to provide easily customisable nanoparticle building kits with unique yet individually adjustable physico-chemical properties by using our NanoSatellite as starting point.

nanoSatellite



Use our Au-NP Configurator to create your own customised Gold Nanoparticles!

Research in nanomedicine gives insight to metabolism at molecular and nanometric level. Several areas of medical care are already benefiting from the advantages of nanotechnology.

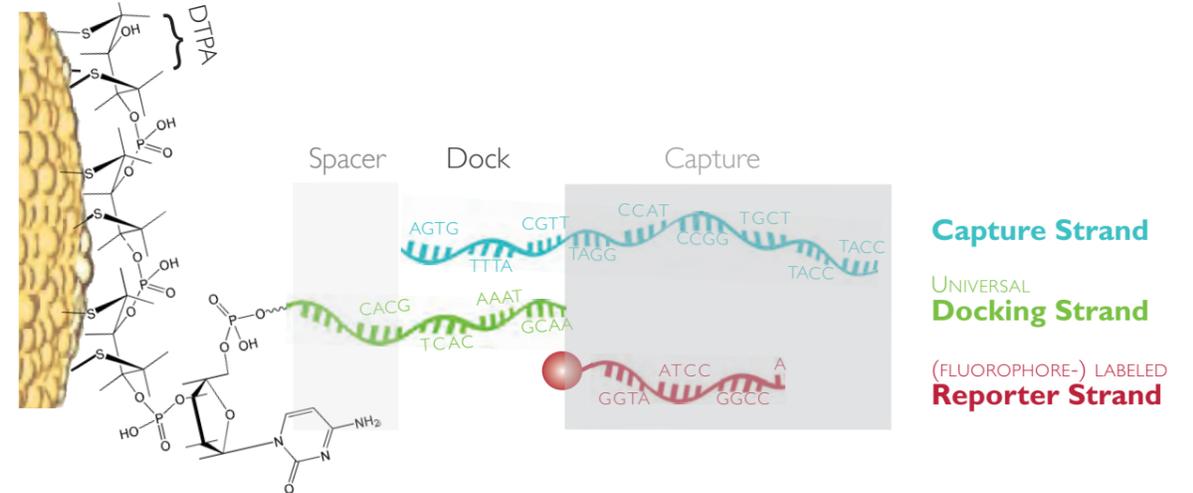
It is our concern to support these efforts by introducing nanoSatellite kits for easy customisable biological functionality to address

- ▶ tumor targeting,
- ▶ agent transport,
- ▶ bio sensoric,
- ▶ diagnostics

DTPA anchoring chemistry allows full control over thermo- and biostability as well as (mixed) loading density for individual application specifications.

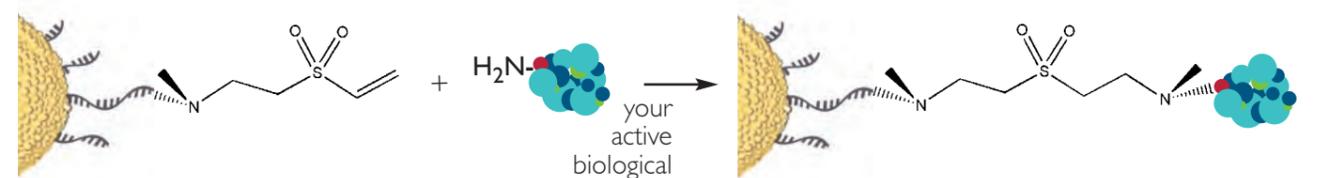
...for customised live cell RNA Detection

Au diameter (nm)	Anchoring Chemistry	Density (pmol/cm ²)	Docking Oligos	Distal Modifications
20	(DTPA) ₃ - oligo	high/ultra (~1-3)	one	none

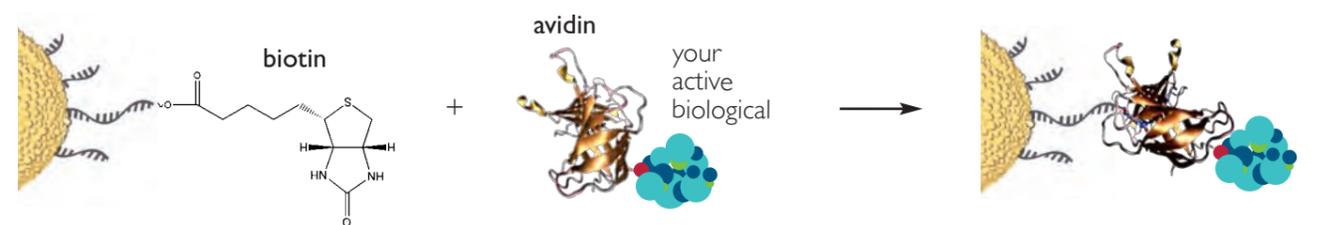


... or easily develop your own tumor targeting and/or agent transport - with Distal Modifications

Au diameter (nm)	Anchoring Chemistry	Density (pmol/cm ²)	Docking Oligos	Distal Modifications
50	(DTPA) ₃ - oligo	medium (0,3-0,6)	one	activated for NH ₂



Au diameter (nm)	Anchoring Chemistry	Density (pmol/cm ²)	Docking Oligos	Distal Modifications
75	(DTPA) ₃ - oligo	low (0,1 - 0,2)	one	biotin



... or any functionalisation mixture as well as fully customised nano-particle modification