

Naveni® TriFlex Cell

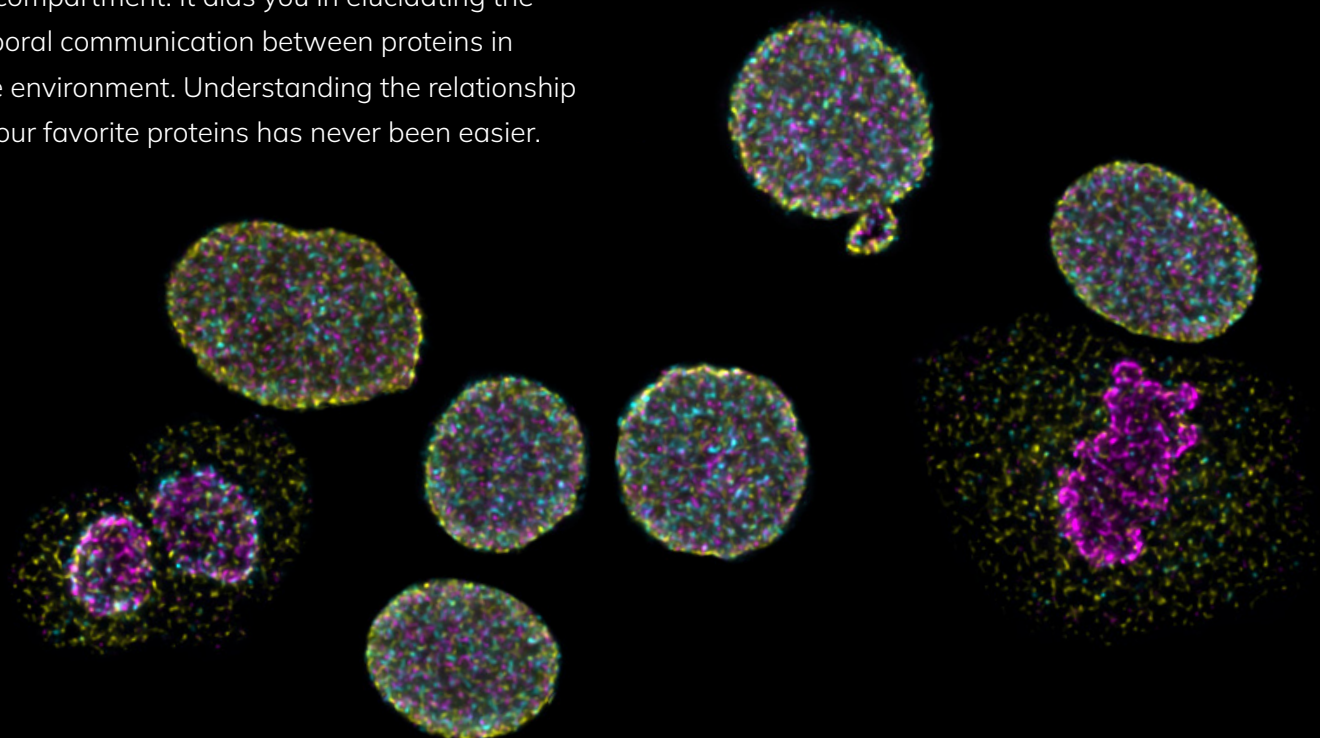
BRINGING PRECISION TO SPATIAL PROTEOMICS

Discover the secret life of proteins

Ever wished there were a way to take a snapshot of two proteins as they interact or remain unbound? The door to studying protein interplay and functional states while retaining the structural integrity of the cell is now open! Find out about protein complex formation and disassembly in response to different stimuli *in situ* with the help of our latest innovation. Naveni® TriFlex Cell is a revolutionary proximity-based technology that can concurrently visualize two proteins, free or interacting, in any cell compartment. It aids you in elucidating the spatiotemporal communication between proteins in their native environment. Understanding the relationship between your favorite proteins has never been easier.

Naveni® TriFlex Cell enables you to:

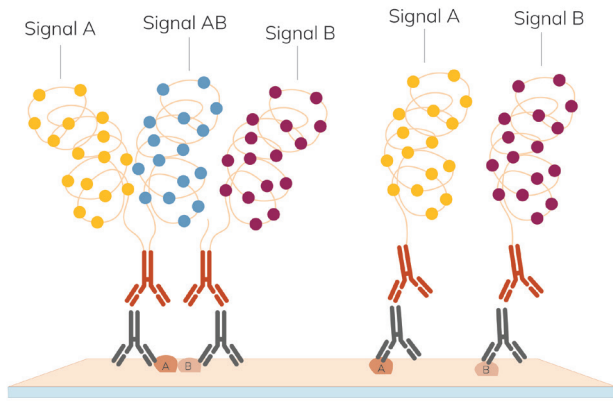
- Study protein functional states and interplay
- Detect the relative amounts of total protein A, total protein B, and the interaction AB between the two proteins
- Visualize and quantify three spectrally distinct fluorescent readouts



Lamin B1/Histone H3 staining in MCF7 cells, 40x objective, deconvolved.

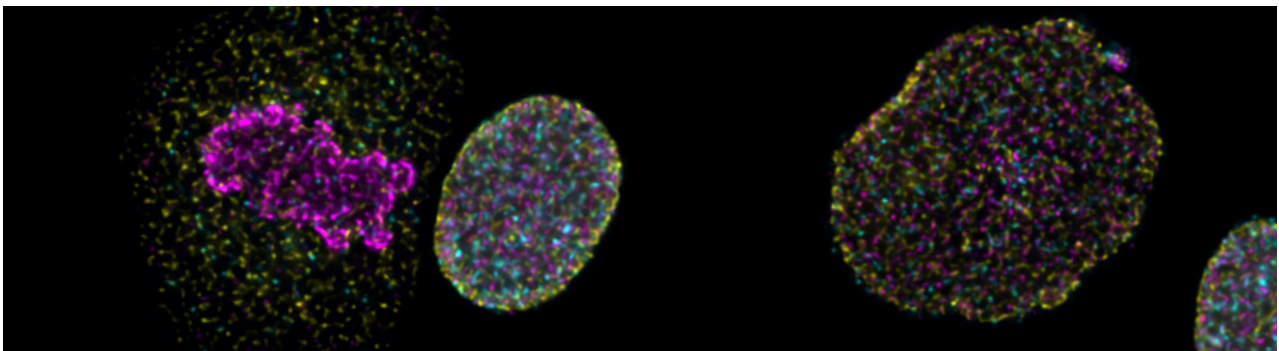
Compatible with established *in situ* workflows

Naveni® TriFlex is a secondary detection system to be used with your own primary antibodies. The method does not require specialized instrumentation and is compatible with established *in situ* workflows.



Naveni® TriFlex Cell relies on two user-determined primary antibodies against the targets of interest, and on proprietary TriFlex Navenibodies (in orange), which are antibody-based proximity reagents. Only proteins located at <40 nm distance are recorded as interacting. Naveni® TriFlex detects total protein A (i.e., both free and in complex with B, yellow), total protein B (maroon), and the AB interaction (blue). The detected A, B and AB signals are amplified and generate fluorescent readout in three channels corresponding to each protein pool.

From the cradle to the grave



Birth: In mitotic cells, Lamin B signals (yellow) are diffuse due to nuclear envelope breakdown, whereas Histone H3 (magenta) remains around the metaphase plate. Lamin B/Histone H3 complexes (cyan) have disassembled.

Life: In non-dividing cells, free Lamin B is localized in the nuclear envelope, and multiple Lamin/Histone H3 interactions are observed in the nucleoplasm together with chromatin-bound Histone H3.

Death: During the initial stages of oncosis, the dying cell's nucleus swells and the nucleoplasm contains less densely packed complexes along with unbound Lamin B and Histone H3.

Ordering information

Naveni TriFlex	Code	Read out	Primary antibodies required
Naveni TriFlex Cell MR	TF.MR.100 (FITC, Cy3, Cy5)	Fluorescence	Mouse and Rabbit
NaveniFlex Cell	Code	Read out	Primary antibodies required
NaveniFlex Cell MR Red/Atto647N	NC.MR.100 Red/Atto647N	Fluorescence	Mouse and Rabbit
NaveniFlex Cell GM Red/Atto647N	NC.GM.100 Red/Atto647N	Fluorescence	Goat and Mouse
NaveniFlex Cell GR Red/Atto647N	NC.GR.100 Red/Atto647N	Fluorescence	Goat and Rabbit

Kit size: 4ml working solution.
Validated for cell samples



For product-specific images and more info, visit our web.
Email: contact@navinci.se