

## Naveni<sup>®</sup> pY PD1

BRINGING PRECISION TO SPATIAL PROTEOMICS

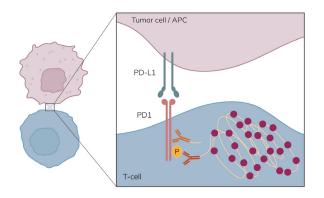
## Investigate PD1 activation in situ

PD1 PD-L1 signaling has proven to be significant in cancer progression, and immune checkpoint inhibitors targeting PD1 PD-L1 have emerged as an essential treatment for cancer patients. PD1 activation is an important step in the signaling pathway<sup>1</sup>, yet phosphorylation of PD1 *in situ* is not well studied, mainly due to lack of specific methods. Navinci has now developed a Proximity Ligation Assays for the specific detection of the phosphorylated PD1.

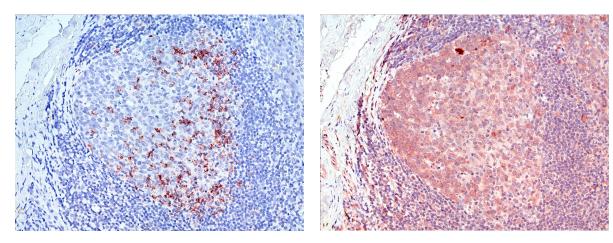
## The Naveni® pY PD1 products enables you to:

- Increase knowledge about PD1 activation and signaling pathways
- Visualize phosphorylated PD1 in the tissue microenvironment
- Specific detection of phosphorylated PD1 using dual recognition
- Study phosphorylated PD1 even at low abundances
- Find better predictive biomarkers for immune checkpoint therapies





The Naveni® pY PD1 kit is based on our proprietary Naveni® Proximity Ligation Technology<sup>2</sup>. The kit includes two Navenibodies conjugated to proprietary oligo arms (depicted as orange antibodies in the illustrations). Only if the Navenibodies are in close proximity will they generate a rolling circle amplification reaction, leading to a strong and distinct signal. The illustration shows the principle of Naveni pY PD1, one Navenibody binds phosphorylated tyrosine and the other to PD1, giving a very specific detection of phosphorylated PD1.



Specific detection of phosphorylated PD1 using Naveni pY PD1 HRP (left), and detection of phosphorylated PD1 using single antibody detection with traditional IHC. Staining was done on tonsil tissue (FFPE) in consecutive sections.

## Ordering information

Naveni PTM	Code	Read out	Primary antibodies required
Naveni pY PD1 AP	NPT.PD1.AP.100	Brightfield and fluorescence	Primary included
Naveni pY PD1 HRP	NPT.PD1.HRP.100	Brightfield	Primary included
Naveni PPI	Code	Read out	Primary antibodies required
Naveni PD1/PD-L1 HRP	PPI.PDL1.HRP.100	Brightfield	Primary included
Naveni PD1/PD-L1 AP	PPI.PDL1.AP.100	Brightfield and fluorescence	Primary included

Kit size: 4ml working solution.

For research use only. Not for use in diagnostic procedures.

1) Patsoukis et al., Revisiting the PD-1 pathway Sci Adv. Sep 18;6(38) (2020).

2) Klaesson A, et al., Improved efficiency of in situ protein analysis by proximity ligation using UnFold probes. Sci Rep. 8(1):5400 (2018).



