

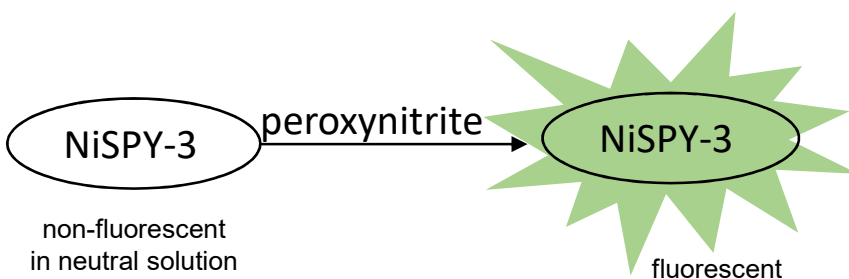
# NiSPY-3

Code no.	Product	Contents	Storage	Stability
SK3003-01	NiSPY-3	1 mg	Store frozen, desiccate and protect from light.	1 year (unopened)

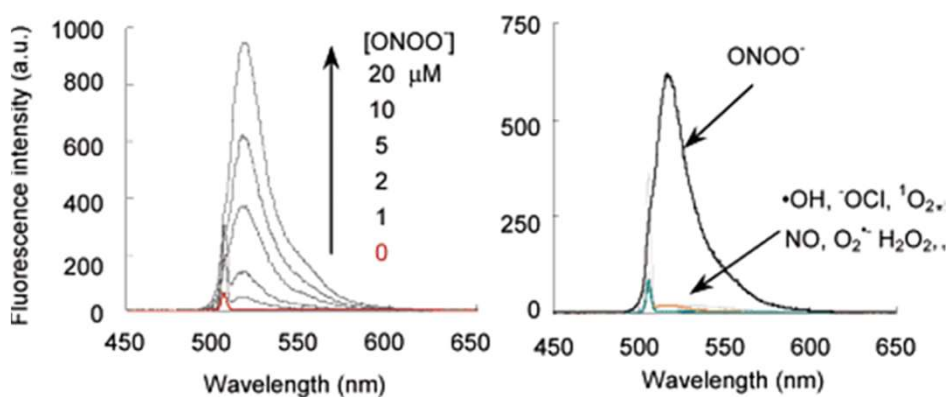
**NiSPY-3 (Nitrativ Stress Sensing Pyrromethene Dye)** is fluorescent reagent used to detect a state of nitrosative stress. **NiSPY-3** reacts specifically with peroxynitrite ( $\text{ONOO}^-$ ). It works as detection reagent for reactive oxygen species.

**NiSPY-3** reacts specifically with peroxynitrite ( $\text{ONOO}^-$ ) among other reactive oxygen species such as  $\cdot\text{OH}$ ,  $\text{O}_2^{\cdot-}$ ,  $\text{H}_2\text{O}_2$ ,  $^1\text{O}_2$ ,  $\text{NO}$  etc. Fluorescent intensity is not increased by the existence of hydroxyl radical, singlet oxygen, hydrogen peroxide, hypochlorite, nitric oxide or superoxide.

- Live cell fluorescent imaging is possible with **NiSPY-3**.



$\lambda_{\text{ex}}$	490
$\lambda_{\text{em}}$	515



Left - Fluorescence spectra of NiSPY-3 solution (10  $\mu\text{M}$  NiSPY-3 in 0.1 M phosphate buffer pH 7.4 containing 0.1% DMF as a cosolvent) upon addition of peroxynitrite (final 0, 1, 2, 5, 10, 20  $\mu\text{M}$ ).

Right - Fluorescence response of NiSPY-3 in various ROS generation systems