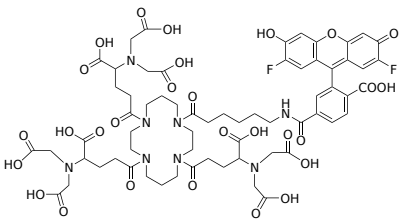
HIS Lite™ OG488-Tris NTA Chelator

Catalog Number: 12655
Unit Size: 100 ug

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	24 months upon receiving

Chemical Properties

Appearance	Solid orange
Molecular Weight	1443.34
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	498 nm
Emission Wavelength	526 nm

Applications

HIS Lite™ OG488-Tris NTA Chelator is used as a sensitive green fluorescent probe for detecting polyhistidine-labeled proteins in combination with the addition of a heavy metal ion such as Ni2+ in cells, solution and solid surfaces. Fluorescent tris-NTA compounds provide an efficient method for site-specific and stable noncovalent fluorescence labeling of polyhistidine-tagged proteins. In contrast to the transient binding of conventional mono-NTA, the multivalent interaction of tris-NTA conjugated fluorophores form a much more stable complex with polyhistidine-tagged proteins. The high selectivity of tris-NTA compounds toward cumulated histidines enables the selective labeling of proteins in cell lysates and on the surface of live cells. Fluorescent tris-NTA conjugates can be applied for the analysis of a ternary protein complex in solution and on surfaces. AAT Bioquest also offers HIS Lite™ OG488-Tris NTA Complex that can be directly used for the specific and highly sensitive detection of His-tagged fusion proteins without the addition of a heavy metal ion. The transition metal ions (e.g., Ni ion)-mediated complexation of polyhistidine-labeled proteins with fluorescent tris-NTA conjugates provides a sensitive reporter for detecting and monitoring protein-protein interactions in real time.