

HIS Lite™ Cy5 Bis NTA-Ni Complex

Catalog number: 12613

Unit size: 1 mg

Product Details

Storage Conditions Freeze (<-15 °C), Minimize light exposure

Expiration Date 12 months upon receiving

Chemical Properties

Appearance Blue solid

Molecular Weight 1500.03

Soluble In Water

Chemical Structure

Spectral Properties

Excitation Wavelength 651 nm

Emission Wavelength 670 nm

Applications

Polyhistidine is one of the most popular affinity tags incorporated into recombinant proteins. It can be inserted either at the N- or C-terminus, and expressed in a variety of hosts. Due to its small size, the polyhistidine tag serves as an elegant tool for both protein purification and detection. HIS Lite™ Cy3 Bis NTA-Ni and Cy5 Bis NTA-Ni Complexes provide specific and highly sensitive detection of His-tagged fusion proteins. The Ni-NTA complexes were first reported by Kapanidis et Al. to be specific for polyhistidine tags with minimal crossreactivity. Cy3 and Cy5 dyes demonstrate strong fluorescent signals at commonly available wavelengths and with little quenching. The Cy3 Bis NTA-Ni and Cy5 Bis NTA-Ni Complexes can be directly applied either to an SDS-PAGE gel or Western blot membrane for fluorescence imaging. Detection with the Cy3 Bis NTA-Ni and Cy5 Bis NTA-Ni Complexes requires less incubation time than for protein-antibody binding. No secondary reaction is required since the Ni-NTA complexes are directly conjugated to the fluorophores.