**Bromo C8 Halotag Oligo**

**Category**
- Others

**Modification Code**
- BrC8

**Reference Catalog Number**
- 26-6455

**5 Prime**
- Y

**3 Prime**
- Y

**Internal**
- Y

**Molecular Weight (mw)**
- 301.09

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For Halotag protein conjugation a Spacer 18 modification should be added internally next to the 5'-Bromo C8. Additional charge applies for Spacer 18 modification.

**Halotag Protein Oligo Conjugation**

Click here for a validated Glen Research Protocol for Oligo Conjugation to Halo Tagged Protein.

The strategy of small-molecule fluorescent labeling of genetically encoded proteins has become a popular alternative to GFP labeling. Among the most widely used approaches is the HaloTag method developed by Promega, which utilizes a bacterial haloalkane dehalogenase. The enzyme removes halides from aliphatic hydrocarbons by a nucleophilic displacement mechanism to form a covalent ester linkage between the haloalkane and Asp106 in the enzyme. In the wild type haloalkane dehalogenase, the ester is quickly hydrolyzed by histidine 272 in the catalytic active site. However, by mutating the histidine to phenylalanine, the HaloTag variant renders the covalent ester bond stable toward hydrolysis. Oligonucleotides should be synthesized with Bromohexyl at the 5' end with an adjacent internal Spacer 18 followed by the sequence of choice to be conjugated. Please note that for our online ordering system the addition of Spacer 18 modification is not automatic and should be added as an internal modification. For fluorescent detection the oligo can be labelled at the 3' end with a fluorophore.

**Halotag Protein Conjugation**
