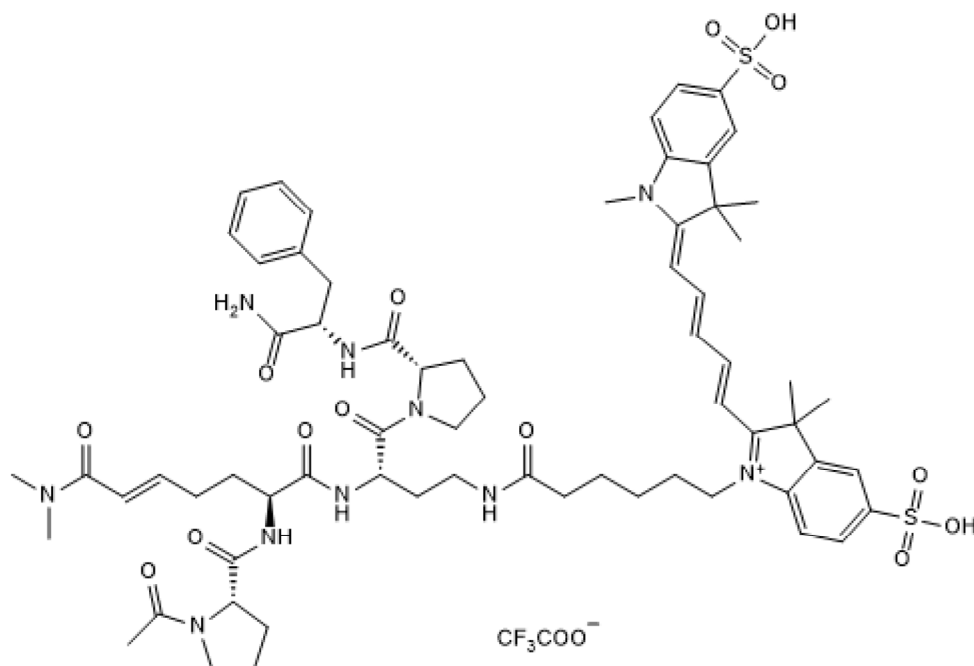


**Product Name:** HB-2-30  
**CAS Number:** 3031522-14-9

**Catalog No.:** 8831 **Batch No.:** 1

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>66</sub>H<sub>86</sub>N<sub>10</sub>O<sub>14</sub>S<sub>2</sub>  
**Batch Molecular Weight:** 1307.59  
**Physical Appearance:** Blue solid  
**Solubility:** Soluble to 13.08 mg/ml in DMSO  
**Storage:** Store at -20°C  
**Peptide Sequence:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 91.4% purity at 648 nm  
**Mass Spectrum:** Consistent with structure  
**UV Spectrum:** Consistent with structure  
**λ<sub>max</sub>:** 645 nm (0.01M PBS pH 7.4)  
**λ<sub>ex</sub>:** 652 nm (0.01M PBS pH 7.4)  
**λ<sub>em</sub>:** 664 nm (0.01M PBS pH 7.4)

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**Product Name:** HB-2-30

**Catalog No.:** 8831

**Batch No.:** 1

CAS Number: 3031522-14-9

**Description:**

Key information: HB-2-30 is a far-red fluorescent TG2 probe for imaging endocytosis in vitro and in vivo. HB-2-30 undergoes highly efficient endocytosis in complex with TG2 and  $\alpha$ 2M via LRP1 pathway. Application: Confocal microscopy. Properties and Photophysical Data: Suitable for multiplexing and can be combined with DAPI (Cat. No. 5748) counter-staining. Excitation and emission maxima ( $\lambda$ ) are 649 and 665 nm, respectively.

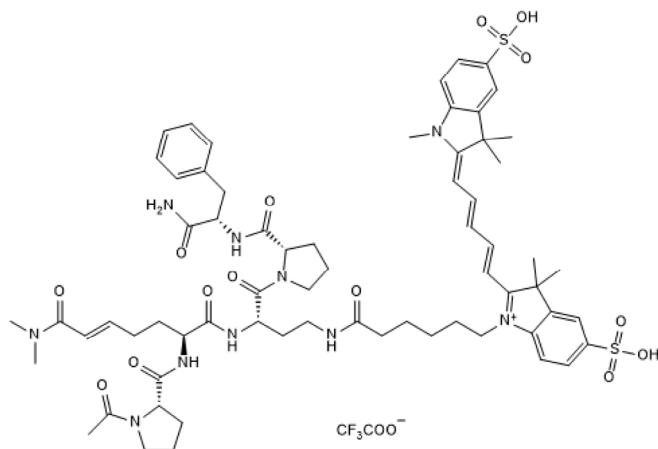
**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>66</sub>H<sub>86</sub>N<sub>10</sub>O<sub>14</sub>S<sub>2</sub>

Batch Molecular Weight: 1307.59

Physical Appearance: Blue solid

**Peptide Sequence:**



**Storage:** Store at -20°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

Soluble to 13.08 mg/ml in DMSO

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such as Cys, Met, Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2  $\mu$ m filter to remove potential bacterial contamination whenever possible.

**Licensing Information:**

Sold under license from Stanford University

**References:**

Loppinet *et al* (2023) Targeted lysosomal degradation of secreted and cell surface proteins through the LRP-1 pathway. *J. Am. Chem. Soc.* **145** 18705. PMID: 37590164.

Loppinet *et al* (2023) LRP-1 links post-translational modifications to efficient presentation of celiac disease-specific T cell antigens. *Cell Chem. Biol.* **30**. PMID: 36608691.

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