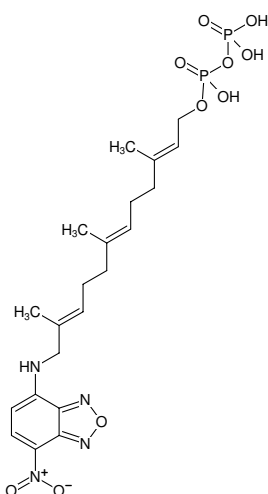


**NBD-FPP**

3,7,11-trimethyl-12-(7-nitro-benzo[1,2,5]oxadiazol-4-ylamino),  
-dodeca-2,6,10-trien-1 pyrophosphate

Fluorescent lipid donor for protein geranylgeranyltransferases (RabGGTase, GGTase-I)

Cat. No.	Amount
LI-013	20 µl



Structural formula of NBD-FPP

**For general laboratory use.**

**Shipping:** shipped on gel packs

**Storage Conditions:** store at -20 °C

**Additional Storage Conditions:** avoid freeze/thaw cycles, store dark

**Shelf Life:** 12 months

**Molecular Formula:** C<sub>21</sub>H<sub>30</sub>N<sub>4</sub>O<sub>10</sub>P<sub>2</sub>

**Molecular Weight:** 560.43 g/mol

**Purity:** ≥ 95 % (HPLC)

**Form:** liquid (Supplied as 1 mM solution in 25 mM (NH<sub>4</sub>)<sub>2</sub>CO<sub>3</sub>)

**Concentration:** 1 mM

**Spectroscopic Properties:** λ<sub>exc</sub> 480 nm, λ<sub>em</sub> 530 nm,  
ε 11.0 L mmol<sup>-1</sup> cm<sup>-1</sup> (pH 7.5)

**Description:**

NBD-FPP is a fluorescent analog of farnesyl pyrophosphate (FPP). It serves as lipid donor for geranylgeranyltransferases (RabGGTase, GGTase-I). NBD-FPP changes its fluorescence upon binding to protein substrates and allows for efficient fluorescence based GGTase activity assays and inhibitor screening.

**Selected References:**

Nguyen *et al.* (2009) Analysis of the eukaryotic prenylome by isoprenoid affinity tagging. *Nature Chemical Biology*. **5** (4):227.

Wu *et al.* (2007) Synthesis of a fluorescent analogue of geranylgeranyl pyrophosphate and its use in a high-throughput fluorometric assay for Rab geranylgeranyltransferase. *Nat. Protoc.* **2** (11):2704.

Dursina *et al.* (2006) Identification and specificity profiling of protein prenyltransferase inhibitors using new fluorescent phosphoisoprenoids. *J. Am. Chem. Soc.* **128** (9):2822.