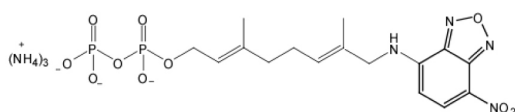


## NBD-GPP

### 3,7-dimethyl-8-(7-nitro-benzo[1,2,5]oxadiazol-4-ylamino)-octa-2,6-diene-1-pyrophosphate

#### Fluorescent lipid donor for protein farnesyltransferase (FTase)

Cat. No.	Amount
LI-014	20 $\mu$ l



For *in vitro* use only  
 Quality guaranteed for 12 months  
 Store at -20°C  
 NBD-GPP must be stored in the dark

#### Avoid freeze-thaw cycles

#### Form

Liquid. 1 mM supplied as a solution in 25 mM  $(\text{NH}_4)_2\text{CO}_3$ .

#### Molecular weight

489.3 g/mol (free anion)

#### Spectroscopic data

Excitation maximum:  $\lambda_{\text{Ex}} = 480$  nm at pH 7.5

Emission maximum:  $\lambda_{\text{Em}} = 530$  nm

Extinction coefficient:  $\epsilon_{\text{max}} = 11,000$   $\text{cm}^{-1} \text{M}^{-1}$

#### Purity

>95% by HPLC

#### Description

NBD-GPP is a fluorescent analog of geranyl pyrophosphate (GPP), similar in length to the native phosphoisoprenoid farnesyl pyrophosphate (FPP).

It serves as lipid donor for farnesyltransferase (FTase) - one of the three mammalian protein prenyltransferases. The attachment of the NBD-geranyl group to protein substrates allows for efficient fluorescence based FTase 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