

# ATP-gamma-S, Kinase substrate ab138911

[22 References](#) [1 Image](#)

### Overview

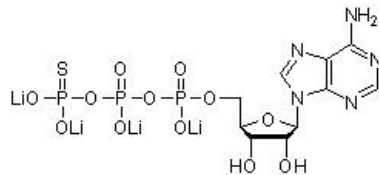
|                      |  |
|----------------------|--|
| <b>Product name</b>  | ATP-gamma-S, Kinase substrate  |
| <b>Description</b>   | Kinase substrate   |
| <b>General notes</b> | Kinase reaction reagent to be used with <a href="#">ab92570</a> rabbit monoclonal to thiophosphate ester for the identification of direct kinase substrates as mentioned in Allen JJ <i>et al.</i> Nat Methods 4:511-6 (2007). |

After the kinase of interest has accepted ATP- $\gamma$ -S, *p*-Nitrobenzyl mesylate ([ab138910](#)) can be used to alkylate the thiophosphorylation site on the substrates. A thiophosphate ester rabbit monoclonal antibody ([ab92570](#)) is introduced to identify the tagged substrates.

For western blot analysis, we used ATP $\gamma$ S or A\*TP $\gamma$ S analogs at a concentration of 1 mM. For kinetic measurements, ATP $\gamma$ S or A\*TP $\gamma$ S analog concentration varied from 0.1  $\mu$ M to 250  $\mu$ M. See Allen JJ *et al.* Nat Methods 4:511-6 (2007); Supp. Material.

**CAS Number** 93839-89-5

### Chemical structure



### Properties

|                             |   |
|-----------------------------|---|
| <b>Chemical name</b>        | Adenosine 5'-(3-thiotriphosphate) tetralithium salt   |
| <b>Molecular weight</b>     | 546.98  |
| <b>Molecular formula</b>    | C <sub>10</sub> H <sub>12</sub> Li <sub>4</sub> N <sub>5</sub> O <sub>12</sub> P <sub>3</sub> S   |
| <b>PubChem identifier</b>   | 5311341   |
| <b>Storage instructions</b> | Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.  |
| <b>Solubility overview</b>  | Soluble in water to 10 mM   |
| <b>Handling</b>             | This product is supplied in one (or more) pack size which is freeze dried. Therefore the contents may not be readily visible, as they can coat the bottom or walls of the vial. Please see our <a href="#">FAQs</a> |

and [information page](#) for more details on handling.

Unstable; make up solutions fresh and use immediately.

Refer to SDS for further information.

Need more advice on solubility, usage and handling? Please visit our [frequently asked questions \(FAQ\) page](#) for more details.

#### SMILES

[Li+].[Li+].[Li+].[Li+].C1=NC2=C(C(=N1)N)N=CN2[C@H]3[C@@H]([C@@H]([C@H](O3)COP(=O)([O-])OP(=O)([O-])OP(=S)([O-])[O-])O)O

#### Source

Synthetic

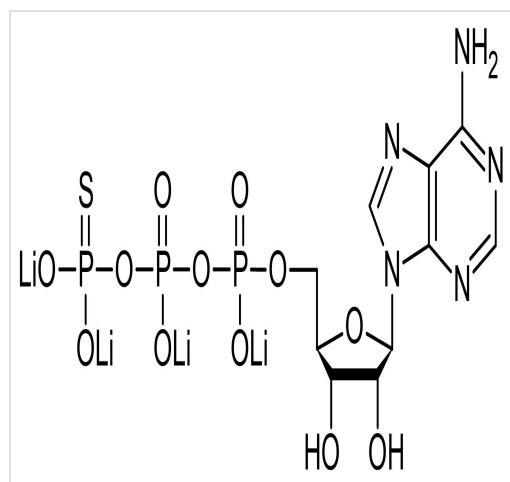
#### Applications

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The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application        | Abreviews | Notes                                    |
|--------------------|-----------|--|
| Functional Studies |           | Use at an assay dependent concentration. |

#### Images



2D chemical structure image of ab138911, ATP-gamma-S, Kinase substrate

Chemical Structure - ATP-gamma-S, Kinase substrate (ab138911)

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