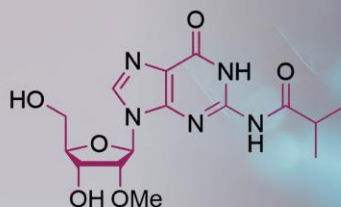


# N2-isobutyryl-2'- OMe-guanosine



## PRODUCT IN FOCUS



## N2-isobutyryl-2'-OMe-guanosine

### INTRODUCTION

N2-Isobutyryl-2'-O-methyl-guanosine (IBG) is a modified nucleoside that has gained significant attention in recent years due to its potential therapeutic and industrial applications. IBG is a derivative of guanosine, a nucleoside that is a building block of RNA and DNA.

### Manufacture

By alkylation of O6-trimethylsilylethyl-3',5'-di-tert-butylsilanediyl guanosine.

### APPLICATIONS

N2-isobutyryl-2'-OMe-guanosine (IBG) has potential applications as follows:

- It's a modified nucleoside that can be used as an activator for DNA synthesis.
- A useful intermediate in the synthesis and probes of novel nucleic acids.
- Detecting DNA/RNA changes is the popular use of this fluorescent chemical.
- Medical Research : IBG has been studied for its role in drug development, with promising results in preclinical studies.
- Clinical Trials : IBG has also been studied in clinical trials for its potential therapeutic effects in various diseases, including viral infections and cancer.
- Environmental research – It has been studied for its effects on ecosystems and its potential role in pollution management.
- Industrial research - IBG has been used in manufacturing processes to improve product quality and efficiency, with health and safety considerations being a major concern.

### Synonym

N-[9-[(2R,3R,4R,5R)-4-hydroxy-5-(hydroxymethyl)-3-methoxyoxolan-2-yl]-6-oxo-1H-purin-2-yl]-2-methylpropanamide

### CAS no.

63264-29-9

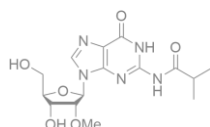
### Molecular formula

C<sub>15</sub>H<sub>21</sub>N<sub>5</sub>O<sub>6</sub>

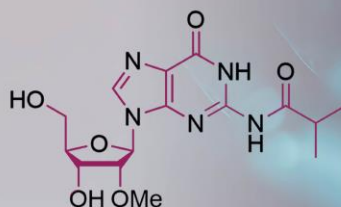
### Molecular weight

367.36 g/mol

### Structure



# N2-isobutyryl-2'- OMe-guanosine



## PRODUCT IN FOCUS



### SPECIFICATIONS

Test	Unit	Specifications
Appearance	-	White to off-white powder
<sup>1</sup> HNMR	-	To conform the structure
MS	-	To conform the structure
Purity by HPLC	%	≥ 98.0
Assay (by QNMR)	%	≥ 97%
Solvent content by GC	%	≤ 3.0
Water content	%	≤ 3.0

### PACKING

25 kg HDPE drum with inner liner

### STORAGE

Recommended storage between 2°C to 8°C

No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please contact us.