
Product Information Sheet

Ordering Information

Product Number:	20318
Product Name:	2',3'-cGAMP-Cy5 conjugate
Unit Size:	100 ug
Storage Conditions:	Freeze (<-15 °C), Minimize light exposure
Expiration Date:	12 months upon receiving

Chemical and Spectral Properties

Appearance:	Solid
Molecular Weight:	2011.32
Soluble In:	DMSO
Excitation Wavelength:	N/A
Emission Wavelength:	N/A

Application Notes

2',3'-cGAMP or cGAMP (Cyclic guanosine monophosphate–adenosine monophosphate) is produced in mammalian cells by cGAS (cGAMP synthase) from ATP and GTP upon cytosolic DNA stimulation. cGAMP produced by cGAS contains mixed phosphodiester linkages, with one between 2'-OH of GMP and 5'-phosphate of AMP and the other between 3'-OH of AMP and 5'-phosphate of GMP. 2',3'-cGAMP is also referred to as "noncanonical" cGAMP due to the presence of the atypical 2'-5' phosphodiester linkage between the guanosine and the adenosine. Similar to the canonical 3',3'-cGAMP, 2',3'-cGAMP serves as a second messenger to activate innate immune responses by binding to STING (stimulator of IFN genes) and subsequently inducing the TBK1-IRF3-dependent production of IFN- γ . This Cy5-labeled cGAMP provides an excellent probe for developing fluorescence-based assays and test for detecting cGAMP and monitoring its activity.