

## GTIF647 [iFluor® 647 gentamicin conjugate]

Catalog Number: 24304 24305, Unit Size: 100 ug 1 mg,

Product Details	
Storage Conditions	Freeze (< -15 °C), Minimize light exposure,
Expiration Date	12 months upon recieving
Chemical Properties	
Appearance	Solid
Molecular Weight	~1100
Soluble In	DMSO
Chemical Structure	
	$\begin{bmatrix} H_{N}^{H} \\ H_{2}^{H} \\ H_$

## **Spectral Properties**

Excitation Wavelength	656 nm
Emission Wavelength	670 nm

## Applications

Gentamicin is widely used for treating tuberculosis and Gram-negative infections and is particularly useful in neonatal intensive care units. Fluorophore-tagged drugs, such as gentamicin- iFluor® 647 (GTIF647) conjugates, might be used to identify drug trafficking routes across the BLB and into hair cells, and specifically in the cochlea - the sensory organ responsible for hearing. Identifying the mechanisms involved in the intracochlear trafficking of ototoxic drugs to hair cells is of fundamental as well as clinical importance. GTIF647 is well excited with the popular red laser at 647 nm or HeNe laser at 632 nm. It provides researchers a valuable tool to study the cellular uptake, kinetics and distribution of gentamicin through fluorescence techniques, such as fluorescence microscopy, fluorescence correlation spectroscopy, single molecule spectroscopy. The iFluor® 647 is well compatible with the common Cy5 filter set.