

5-(and-6)-Carboxy SNARF-1 AM Ester

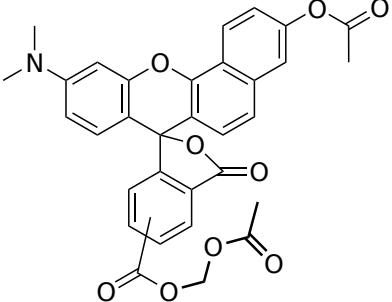
Catalog Number: 21229

Unit Size: 10x50 ug

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid light yellow
Molecular Weight	567.55
Soluble In	DMSO
Chemical Structure	 The chemical structure of 5-(and-6)-Carboxy SNARF-1 AM Ester is a complex polycyclic compound. It features a central tricyclic core with two fused five-membered rings. One ring is substituted with a dimethylaminophenyl group (-N(CH ₃) ₂ -Phenyl) and the other with a carboxymethyl group (-CH ₂ COO-). The core is further substituted with two phenyl groups, each having a carboxymethyl ester side chain (-CH ₂ COO-CH ₂ -Phenyl).

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

5-(and-6)-Carboxy SNARF-1 is an excellent pH probe for monitoring pH changes in the range of 6.5 and 8.5. It has pKa of ~7.5. The cell-permeable 5-(and-6)-Carboxy SNARF-1 AM Ester is designed to be used in live cells. It exhibits a significant pH-dependent emission shift from yellow orange to deep red fluorescence under acidic and basic conditions, respectively. The ratioable pH dependent fluorescence intensity change allows the ratio of the fluorescence intensities from the dye at two emission wavelengths - typically 580 nm and 640 nm - to be used for quantitative determinations of pH in cells and other biological media.