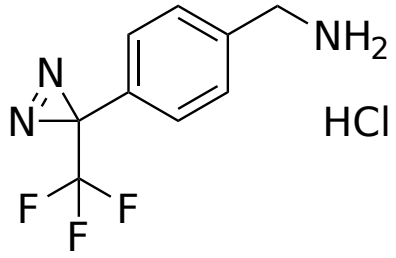
Trifluoromethyl phenyl diazirine amine

Catalog Number: 39009
Unit Size: 10 mg

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	24 months upon receiving

Chemical Properties

Appearance	Solid white
Molecular Weight	251.64
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Trifluoromethylphenyldiazirines are one type of the most effective diazirines with generally high photoreaction reaction yield by UV irradiation (~350 nm). Diazirines are known for their ability to undergo photochemical reactions when exposed to ultraviolet (UV) light, specifically by forming highly reactive carbene intermediates that react with nearby molecules. The phenylcarbenes generated by the UV irradiation of trifluoromethylphenyldiazirines have much higher reactivity than nitrenes (generated by phenylazides). Phenylcarbene is incactivated by water when neighboring target molecules are absent, and thus does not lead to non-specific crosslinking. This property makes diazirines useful for studying protein-protein, protein-nucleic acid interactions, ligand-receptor binding, and other biomolecular interactions. It's important to note that diazirines are highly reactive and can be challenging to handle due to their instability.