

Product Information Sheet

Ordering Information

Product Number:	472
Product Name:	SunRed™, SE
Unit Size:	5 mg
Storage Conditions:	<-15 °C and kept from light and moisture
Expiration Date:	12 months upon receiving

Chemical, Physical and Spectral Properties

Molecular Weight:	1123.34
Appearance:	Purple solid
Soluble in:	DMF
Excitation Wavelength:	583 nm
Emission Wavelength:	603 nm

Application Notes

Although sulforhodamine 101 acid chloride (also called Texas Red®) is the most popular labeling reagent of sulfonyl chloride, it is quite unstable in water, especially at the higher pH required for reaction with aliphatic amines. Texas Red (TR) reacts with alcohols, thiols, aliphatic amines and aromatic amines indiscriminately. In addition, the labeling efficiency of Texas Red is extremely low compared to dye succinimidyl esters. SunRed™ SE is a succinimidyl ester. It is an excellent replacement for Texas Red. SunRed reacts with amine compounds such as amino acids, peptides and proteins to give bright red fluorescent conjugates that are extremely stable. Compared to Texas Red, SunRed has much higher labeling efficiency, and more importantly the resulted conjugate is more fluorescent and water soluble than the corresponding Texas Red conjugate. The conjugates of SunRed have the identical excitation and emission wavelengths to those of Texas Red. Our in-house studies indicated that SunRed is more stable than Texas Red under the same labeling conditions. It is extremely useful for labeling hydrophobic peptides, giving the fluorescent conjugates that are much easier to be purified and more water soluble to use.