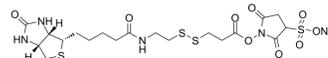


Sulfo-NHS-SS-Biotin sodium

Cat. No.:	HY-111496
CAS No.:	325143-98-4
Molecular Formula:	C ₁₉ H ₂₇ N ₄ NaO ₉ S ₄
Molecular Weight:	606.69
Target:	Fluorescent Dye
Pathway:	Others
Storage:	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (206.04 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
	Preparing Stock Solutions			
	1 mM	1.6483 mL	8.2414 mL	16.4829 mL
	5 mM	0.3297 mL	1.6483 mL	3.2966 mL
	10 mM	0.1648 mL	0.8241 mL	1.6483 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (3.43 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (3.43 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (3.43 mM); Clear solution 			

BIOLOGICAL ACTIVITY

Description	Sulfo-NHS-SS-biotin is a long-chain cleavable and cell-impermeant amine-reactive biotinylation reagent. Sulfo-NHS-SS-biotin can be used for the labeling and purifying of cell-surface protein ^[1] .
IC₅₀ & Target	IC ₅₀ : cell-surface protein ^[1]
In Vitro	Sulfo-NHS-SS-biotin is a cell-surface-labeling reagent, it is a negatively charged reagent and does not permeate cell membranes ^[1] . Sulfo-NHS-SS-biotin reacts with primary amines (NH ₂), such as lysine side-chains, or the amino-termini of polypeptides ^[1] .

?Sulfo-NHS-SS-biotin has a sulfonate group and prevents it from permeating cell membranes. The group's cleavable spacer arm enables initially biotinylated proteins to be released from streptavidin affinity columns^[1].

?Sulfo-NHS-SS-biotin (1 mg/ml; 15 min) is applied in cells in monolayer culture (washed by? ice-cold PBS). The biotinylation reactions are terminated with 100 mM glycine in PBS. After washing with PBS, cell extracts are prepared in RIPA buffer with protease inhibitor cocktail (HY-K0010). Biotinylated membrane proteins are precipitated with streptavidin-sepharose and proteins are eluted with SDS sample buffer^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Chia CP, et al. Phagocytosis in Dictyostelium discoideum is inhibited by antibodies directed primarily against common carbohydrate epitopes of a major cell-surface plasma membrane glycoprotein. *Exp Cell Res.* 1989 Mar;181(1):11-26.

[2]. Jo M, et al. Cell signaling by urokinase-type plasminogen activator receptor induces stem cell-like properties in breast cancer cells. *Cancer Res.* 2010 Nov 1;70(21):8948-58.

Caution: Product has not been fully validated for medical applications. For research use only.

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