



Soluble Lyophilized Silk Fibroin

Cat. No. NAT-0064

Lot. No. (See product label)

cat	NAT-0064
Product Name	Soluble Lyophilized Silk Fibroin
Common Name	Soluble Lyophilized Silk Fibroin
Description	Same as the solution after purification, the soluble lyophilized silk fibroin can also be used as a basic raw material for fabrication of many biomedical products. Furthermore, soluble lyophilized silk fibroin has advantages of longer and ambient storage, easier transportation and higher concentration of regenerated solution compare to regular silk fibroin solution.
Morphology & Appearance	Lyophilized agents
Source	Degummed Bombyx mori silkworm
Storage	Stored in a dry, ventilated place at room temperature.
Shipping & Packaging	20 ML Penicillin Bottle
Application	Large molecular weight silk fibroin in aqueous solution can be processed into different solid material formats. Unfortunately, the purified silk solution can't be stored or transported for a long time as silk undergoes structural changes and aggregates due to thermodynamic instability. Our proprietary lyophilized silk product completely solve these problems and the lyophilized silk can be dissolved in water or buffer at high concentration, facilitating downstream material processing.

Lyophilized silk in a glass vial presents to be a white porous sponge.

Since the vial is completely sealed, lyophilized silk can remain stable

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for a long period of time (> 18 months) at room temperature in terms of appearance, solubility, molecular weight distribution and structure. The regenerated silk solution remains the same structural transition capability from random coil and α -helix structure to β -sheet structure as original silk solution, which is critical in preparation of solid material formats.

Usage	Lyophilized silk fibroin can be stored at room temperature for 18 months. Before use, water or buffer or cell/drug solution can be added into the sterile glass bottle using a needle syringe (keep sealed) or a pipette (open bottle). The lyophilized silk cake in the bottle can be quickly rehydrated forming a light yellow solution and the silk concentrations obtained can reach up to 30-40%.
Concentration	$\leq 40\%$
molecular weight g/mol	$\geq 200,000$ Da
Stability	18 months

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