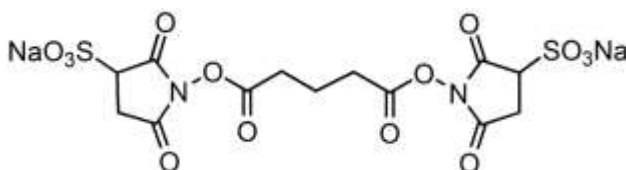


BS²G Crosslinker Protocol and Product Information Sheet

Product Category:	Homobifunctional Crosslinkers
Catalog Number(s):	c1126-100mg , c1126-1g , c1126-custom
Product Name:	BS ² G Crosslinker
Alternative Name(s):	BS ² G; Sulfo-DSG; Bis(Sulfosuccinimidyl) glutarate; Glutaric acid-bis-(3-sulfo-N-hydroxysuccinimide ester)
CAS Number:	n/a
Chemical Formula:	C ₁₃ H ₁₂ N ₂ O ₁₄ S ₂ Na ₂
Molecular Weight:	530.35
Spacer Arm Length:	7.7 Å
Storage:	Upon receipt store at -20°C (shipped at ambient temperature). Protect from moisture (i.e. humidity); blanket under desiccated, inert gas.



General BS²G Crosslinking Protocol

1. Allow vial of BS²G Crosslinker to fully equilibrate to ambient temperature before opening to prevent condensation inside the vial (BS²G is moisture-sensitive).
2. Immediately before use, prepare a 50 mM solution of BS²G by dissolving 10 mg BS²G crosslinker in 350 µL of 25 mM Sodium Phosphate, pH 7.4 (do not use amine containing buffers for the conjugation reaction).
3. Using a 20-fold excess approach (20:1 Crosslinker:Protein), add crosslinker solution to the protein sample, so that the final crosslinker concentration is between 0.5 to 5 mM.
4. Allow the sample to react at room temperature for 45 minutes to 1 hour. Allow slightly longer if reaction must be done on ice (this reaction rate is only slightly slower at low temperatures).
5. Quench and unreacted BS²G crosslinking reagent with 25 mM to 60 mM Tris and allow to react for 10-15 minutes at room temperature.
6. Desalt sample to remove unreacted crosslinker (i.e. gel filtration, dialysis, etc.)

References:

- Wong, S.S. (1993) CRC Chemistry of Protein Conjugation and Crosslinking. CRC Press, Boca Raton, Florida.
- Kotite, N.J., Staros, J.V., Cunningham, L.W. (1984). *Biochemistry*, 23, 3099-3104.
- Dihazi, G.H., Sinz, A. (2003) *Rapid Commun. Mass Spectrom.* 17, 2005-2014.