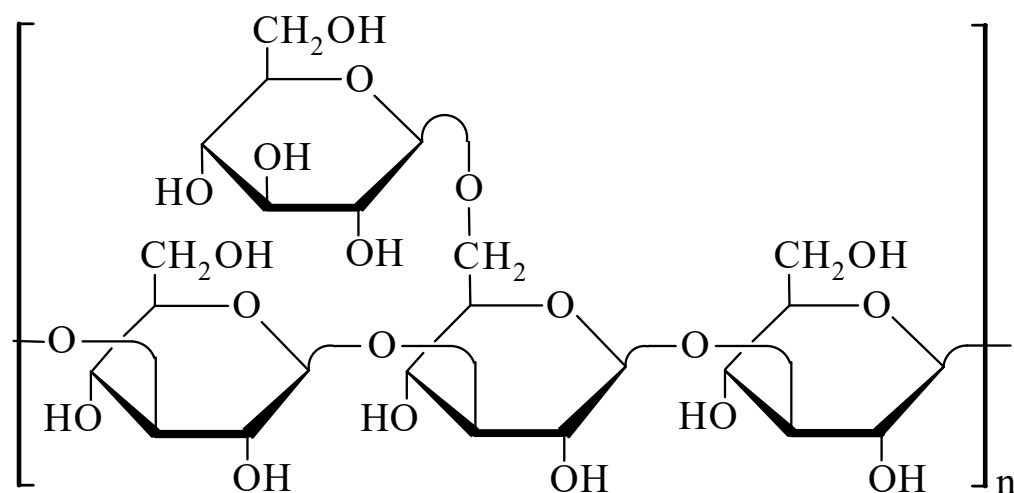




>>Entry Name: Schizophyllan

ENTRY UNDER REVIEW

Synonym(s): Sizofiran, 9CI, INN, JAN. Sonfilan. SPG



CAS Registry Number: 9050-67-3

Molecular Formula:  $C_{24}H_{40}O_{20}$

Molecular Weight: 648.568

Accurate Mass: 648.2113

Percentage Composition: C 44.45%; H 6.22%; O 49.34%

Biological Source: Isol. from *Schizophyllum commune*

Use/Importance: Antineoplastic agent showing activity against sarcoma-180 ascites. Also augments antineoplastic props. of Interleukin 2 [BSQ29-V](#) in mice. Immunostimulant

Development Status: Launched 1985

Solubility: BERDY SOL: Sol.  $H_2O$ ; poorly sol. MeOH, hexane, EtOH

Other Data: Possesses triple-helical struct.

>>Derivative: Stereoisomer

Synonym(s): Scleroglucan. Sclerosan

CAS Registry Number: 39464-87-4

Molecular Formula:  $C_{24}H_{40}O_{20}$

Molecular Weight: 648.568

Accurate Mass: 648.2113

Percentage Composition: C 44.45%; H 6.22%; O 49.34%

Biological Source: Isol. from *Sclerotium glaucum*

Use/Importance: Shows antineoplastic activity. Used for coating paper, and in food industry as a noncaloric, stable gelling agent

Optical Rotation:  $[\alpha]_D -1$  (NaOH aq.)

Solubility: BERDY SOL: Sol.  $H_2O$ , MeOH; poorly sol. EtOH,  $Me_2CO$ , hexane

References:

- Belg. Pat., 1964, Pillsbury, 639 361; CA, **62**, 11119e, (Scleroglucon, isol)  
Komatsu, N. *et al.*, Gann, 1969, **60**, 137, (isol, props)  
Kikumoto, S. *et al.*, Nippon Nogei Kagaku Kaishi, 1970, **44**, 337; 1971, **45**, 162, (isol, struct)  
Singh, P.P. *et al.*, Carbohydr. Res., 1974, **37**, 245, (Scleroglucan, pharmacol)  
Saito, H. *et al.*, Carbohydr. Res., 1979, **74**, 227, (cmr, struct)  
Cottrell, I.W., ACS Symp. Ser., 1980, **126**, 251, (rev)  
Rinaudo, M. *et al.*, Carbohydr. Res., 1980, **100**, 117, (deriv)  
Tabata, K. *et al.*, Carbohydr. Res., 1981, **89**, 121  
Rinaudo, M. *et al.*, Carbohydr. Polym., 1982, **2**, 135, (deriv, cmr, struct, conformn)  
Bluhm, T.L. *et al.*, Carbohydr. Res., 1982, **100**, 117, (conformn)  
Van, K. *et al.*, Polym. J. (Tokyo), 1984, **16**, 61, (ord)  
Takeo, K. *et al.*, Carbohydr. Res., 1986, **145**, 293, (synth)  
Furue, H., Drugs of Today (Barcelona), 1987, **23**, 335, (rev)  
Pretus, H.A. *et al.*, J. Pharmacol. Exp. Ther., 1991, **257**, 500, (Scleroglucan)  
Ikeuchi, K., Keio J. Med., 1991, **40**, 132, (pharmacol)  
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, 1993, 1412  
Teramoto, A. *et al.*, Biopolymers, 1995, **36**, 803, (conformn)