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**Article:**

Ali, S, Dapson, RW, Horobin, RW et al. (2 more authors) (2022) At least four distinct blue cationic phthalocyanine dyes sold as “alcian blue” raises the question: what is alcian blue? *Biotechnic and Histochemistry*, 97 (1). pp. 11-20. ISSN 1052-0295

<https://doi.org/10.1080/10520295.2021.2018497>

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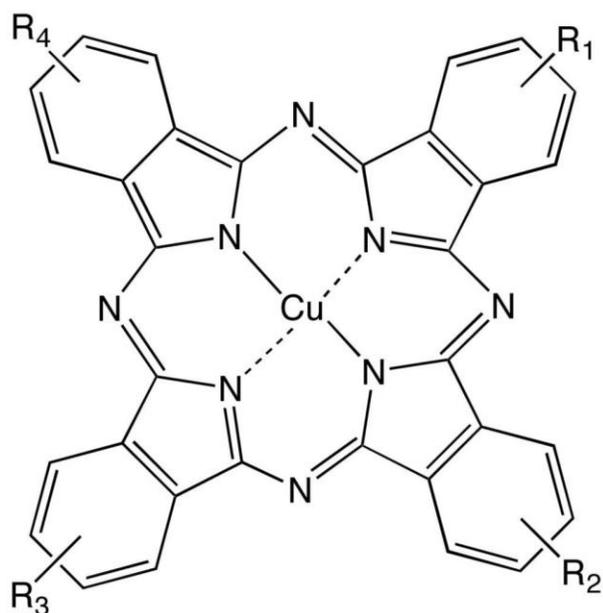
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Structure	Dye name	Side-chain identities				Features of commercial dyes
		R1	R2	R3	R4	
a	Alcian blue 8GS/X CI 74240	S1	S1	S1	S1	Also contains dyes with fewer side-chains; the substitution pattern is unknown
b	Alcian blue pyridine variant	S2	S2	S2	S2	Substitution pattern unknown
c	Astra blue 6GLL	S3	S3	S3	H	Nominal side-chain substitution pattern is 1, 8, 15
d	Propyl astra blue	S3	S4	S4	H	Nominal side-chain substitution pattern is 1, 8, 15
e	Alcec blue	S5	S5	S5	S5	
f	Propyl astra blue Merck cat.	S5	S5	S5	H	Nominal side-chain substitution pattern is 1, 8, 15
g	Fast blue 8XM	S6	S6	S6	H	Also contain dye with two side-chain; substitution pattern unknown