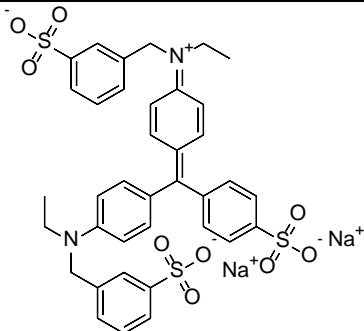


Product data sheet



| | |
|---|---|
| MedKoo Cat#: 330154 Name: Light Green SF Yellowish CAS: 5141-20-8 Chemical Formula: C ₃₇ H ₃₄ N ₂ Na ₂ O ₉ S ₃ Molecular Weight: 792.8435 |  |
| Product supplied as: | Powder |
| Purity (by HPLC): | ≥ 98% |
| Shipping conditions | Ambient temperature |
| Storage conditions: | Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks. |

1. Product description:

Light green SF yellowish (C.I. 42095) is a dye that is used for the preparation of a staining solution which is widely used as a counterstain. for e.g. trichrome Masson-Goldner staining in histological sections or for Papanicolaou's polychromatic staining in cytology of samples human origin

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

| Solvent | Max Conc. mg/mL | Max Conc. mM |
|---------|-----------------|--------------|
| TBD | TBD | TBD |

4. Stock solution preparation table:

| Concentration / Solvent Volume / Mass | 1 mg | 5 mg | 10 mg |
|---------------------------------------|---------|---------|----------|
| 1 mM | 1.26 mL | 6.31 mL | 12.61 mL |
| 5 mM | 0.25 mL | 1.26 mL | 2.52 mL |
| 10 mM | 0.13 mL | 0.63 mL | 1.26 mL |
| 50 mM | 0.03 mL | 0.13 mL | 0.25 mL |

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

- Bajaj R, Chong LB, Zou L, Tsakalozou E, Ni Z, Giacomini KM, Kroetz DL. Interaction of Commonly Used Oral Molecular Excipients with P-glycoprotein. AAPS J. 2021 Sep 15;23(5):106. doi: 10.1208/s12248-021-00631-8. PMID: 34528148; PMCID: PMC9148196.
- Haddad A, Merouani S, Hannachi C, Hamdaoui O, Hamrouni B. Intensification of light green SF yellowish (LGSFY) photodegradation in water by iodate ions: Iodine radicals implication in the degradation process and impacts of water matrix components. Sci Total Environ. 2019 Feb 20;652:1219-1227. doi: 10.1016/j.scitotenv.2018.10.183. Epub 2018 Oct 15. PMID: 30586808.

In vivo study

- Haritoglou C, Tadayoni R, May CA, Gass CA, Freyer W, Priglinger SG, Kampik A. Short-term in vivo evaluation of novel vital dyes for intraocular surgery. Retina. 2006 Jul-Aug;26(6):673-8. doi: 10.1097/01.iae.0000236505.42892.54. PMID: 16829811.

7. Bioactivity

Biological target:

Light green SF yellowish (Acid Green 5) is a triarylmethane dye.

Product data sheet



In vitro activity

The remaining two potential inhibitors were light green SF yellowish (45% decrease) and β -cyclodextrin (β -CD, 75% decrease). Dose-response analyses confirmed both of these excipients as modest inhibitors of digoxin flux, with IC_{50} estimates of 168 μ M (95% CI, 118–251 μ M, Figure 3D) and 204 μ M (95% CI, 5.9–1745 μ M, Figure 3E) for β -CD and light green SF yellowish, respectively (Figures 3D and 3E).

Reference: AAPS J. 2021 Sep 15;23(5):106. <https://pubmed.ncbi.nlm.nih.gov/34528148/>

In vivo activity

Four dyes in different solutions (light green SF yellowish [LGSF]: 2%; copper(II) phthalocyanine-tetrasulfonic acid [E68]: 2% and 0.5%; bromophenol blue [BPB]: 2%, 1%, and 0.2%; and Chicago blue [CB]: 2% and 0.5%) were included in this investigation. After triamcinolone-assisted vitrectomy on 10 porcine eyes in vivo, the dyes were first injected into the air-filled vitreous cavity. No staining of the retinal surface but of the vitreous was seen after application of LGSF 2%.

Reference: Retina. 2006 Jul-Aug;26(6):673-8. <https://pubmed.ncbi.nlm.nih.gov/16829811/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.