46117 Landing Parkway, Fremont, CA 94538 U.S.A. Tel: 1-510-265-1027; Fax: 1-510-265-1352

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PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: 5-(and-6)-Carboxyrhodamine, 110-X, hydrochloride

(5(6)-CR110-X)

CATALOG # 90002

MOLECULAR $C_{28}H_{30}ClN_3O_6$ **INFORMATION:** Mwt: 524

$$\begin{array}{c|c} H_2N & O & NH_2^+C\Gamma \\ \hline & CO_2H & \\ N & CO_2H \end{array}$$

PROPERTIES:

Color & Form Orange red solid Purity >95% by TLC

Soluble in water, DMSO or DMF

Absorption/Emission 502/524nm (MeOH)

Extinction >81,000

Coefficient

STORAGE AND St

HANDLING:

Store desiccated at $\leq 4^{\circ}$ C and protect from light.

APPLICATION:

5-(and-6)-Carboxyrhodamine 110-X is similar to 5-(and-6)-carboxyrhodamine 110 (#90000). The X linker molecule is useful to reduce the interaction between the dye and the biomolecule to be labeled. See figure below for photostability comparison with other dyes.

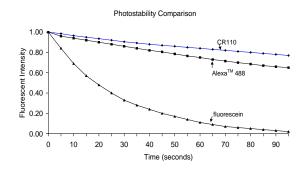


Figure 7.6 Photostability comparison of carboxyrhdamine 110-, fluorescein- and Alexa™ 488. Carboxyrhodamine 110 is more photostable than fluorescein and Alexa™ 488.

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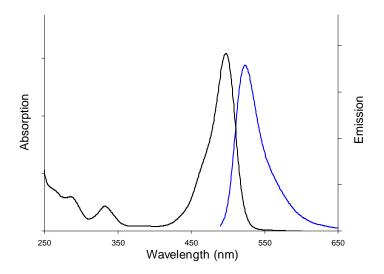


Figure 7.5 Absorption and emission spectra of CR110 and its derivatives in pH7 buffer.

TOXICITY: Not established. Not listed by NTP, IARC or OSHA.

FIRST AID:	Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on
	clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with
	plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing,
	move individual to fresh air and seek medical advice immediately.

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