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# Tetraphenyl Chlorin Disulfonate

National Cancer Institute

## Source

National Cancer Institute. *Tetraphenyl Chlorin Disulfonate*. NCI Thesaurus. Code C88344.

A meso-tetraphenylchlorin substituted by two adjacent sulfonated groups with potential photosensitizing activity. Upon administration, tetraphenyl chlorin disulfonate incorporates into the cell's endosome and lysosome membranes. Subsequently, cytotoxic agents are administered and accumulate in endosomal and lysosomal compartments; upon local activation by light, tetraphenyl chlorin disulfonate produces reactive oxygen species (ROS), such as singlet oxygen, damaging endo/lysosomal membranes and accumulated cytotoxic agents are released into the tumor cell cytosol. This photochemical internalization (PCI) method can enhance the efficacy and selectivity of cytotoxic agents.