

Zwitterionic CHOL derivative for Membrane Protein (MP) Study

What is it?

- Novel Cholesterol (CHOL) alternative for MP study.
- Zwitterionic sulfobetaine based CHOL derivative.
- Better tool for analyzing steroid-dependent MPs.
- Enhanced solubility and bio-activity in comparison to commercially available CHOL & its derivatives.
- Improved hydrophile-lipophile balance (HLB, 28.23) allowing it to act as solubilizer.

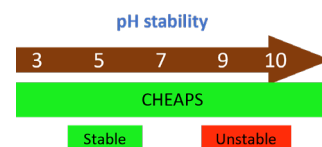
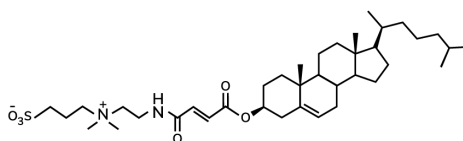


Image A

Why Use it?

- Stable at a wide range of pH (image A) and in presence of divalent ions
- Readily solubilized in both detergents and membrane-active polymers.
- Better solubility in detergents (LMNG and DDM) than CHS Tris Salt (CH210)
- Non-hygroscopic, hence easier to store
- CHEAPS has low absorbance at 280 nm in DDM and LMNG solutions, hassle free protein monitoring

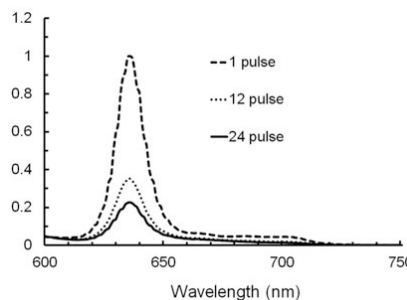


Image B

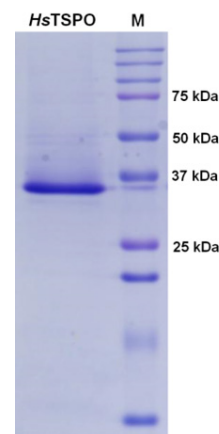


Image C

Product Specification

Cat # CH240
Molecular Formula: $C_{38}H_{64}N_2O_6S$
CAS Number: NA
Formula Weight: 676.99
Identity: IR spectrum confirms to specification.
Solubility: 1.2% in a 6% water solution of CHAPS.
Appearance: White to Off-White powder.

Ordering Information

PART #	DESCRIPTION	UNIT SIZE
CH240 250 MG	CHEAPS	250 mg
CH240 500 MG	CHEAPS	500 mg
CH240 1 GM	CHEAPS	1 gm

Applications

- CHEAPS effectively binds to HsTSPO (Mitochondrial Translocator Protein) and maintains its natural structure and activity.
- Image B: The degradation of PpIX with activity of HsTSPO purified by CHEAPS using LMNG.
- Image C: SDS image of HsTSPO purified with LMNG in the presence of CHEAPS.

References

Trinh, T. K. H., Qiu, W., Thornton, M., Carpenter, E. E., & Guo, Y. (2021). Biochimica et Biophysica Acta (BBA)-General Subjects, 1865(7), 129908.