

PKCa cell line

Catalogue number: 156372

Sub-type: Continuous

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: PKCa cell line

Alternate name: MCF7

Class:

Conjugate:

Description: Approximately 70% of breast cancer patients have estrogen receptor positive (ER+) tumors. The selective estrogen receptor modulator (SERM), tamoxifen, and aromatase inhibitors (AIs) represent first-line treatment for ER+ patients however, up to 50% of patients either do not respond or acquire resistance within 5 years of treatment. The MCF7-PKCa cell line was engineered to exogenously overexpress Protein Kinase C alpha (PKCa) which rendered it resistant to tamoxifen. MCF7-PKCa represents a valuable model for tamoxifen resistance and for screening the effectiveness of alternatives.

Purpose:

Parental cell: MCF-7

Organism: Human

Tissue: Breast

Model: Cancer Model

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: Engineered to over-express PKCa.

Target details

Target: PKC α

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes: Engineered to over-express PKC α .

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions: Dry ice

Related tools

Related tools:

References

References: Lahtinen et. al. 2023. Cncer Cell. 41(6):1103-1117.e12. PMID: 37207655; Avellino et al. 2023. American Journal of Physiology-Cell Physiology. PMID: 36878843; Bagshaw et. al. 2022. Mitochondrial Intoxication, 723-744. DOI: <https://doi.org/10.1016/B978-0-323-88462-4.00008-0>; Gassl et al. Cancers (Basel) 2022 Nov 16,14(22):5617. PMID: 36428711; Wang et al. Biomolecules 2022 Oct 27,12(11):1575. PMID: 36358924; Villar et al. 2022. Nat Chem Biol. PMID: 36280791; Gardner et al. 2022. Am J Physiol Cell Physiol 323(3):C823-C834. PMID: 35876286; Golikov et al. 2022. Mol Biol (Mosk) 56(5):687-696. PMID: 36165010; Taurino et al. 2022. Mol Metab. 101532 PMID: 35752287; Wang et al. 2022. Biomolecules. 12(6):743. PMID: 35740868; Bagshaw et al. 2021. Biomaterials and Biosystems.4 (100027): 2666-5344. PMID: 36824572; Golikov et al. 2022. Antioxidants 2022, 11, 97. PMID: 35052601; Kalimuthu et al. 2021. J Cell Biochem. PMID: 34935169; Hennequart et al. 2021. Nature Communications. 12: 6176. PMID: 34702840; Chiu et al. 2021. American Society of Hematology. Blood Advances. PMID: 34614505; Cox et al. 2020. Journal of Data and Information Science. 5(3): 161-177. DOI: <https://doi.org/10.2478/jdis-2020-0016>; Moradi et al. 2021. Biomolecules. 11(8): 1177. PMID: 34439843; Barekatain et al. 2021. Nature. 12: 4228. PMID: 34244484; Moradi et al. 2021. American Journal of Physiology. Cell Physiology. 321 (1): C72-C81; Khadka et al. 2021. Cancer & Metabolism. 9:27. PMID: 34172075; Abbas et al. 2021. Comp Biochem Physiol B Biochem Mol Biol. 254:110570. PMID: 33516822; Ackermann et al. 2019. Trends Cancer. 5(6):329-332. PMID: 31208694; Vande Voorde et al. 2019. Sci Adv. 5(1):eaau7314. PMID: 30613774