HCT 116 BRCA2 -/- [42] Cell Line

Catalogue number: 152628
Sub-type: Continuous
Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: HCT 116 BRCA2 -/- [42] Cell Line

Alternate name: HCT 116 BRCA2(-/-) clone 42; HCT 116 BRCA2(-/-)

Class:
Conjugate:
Description: BRAC2 inherited mutations predispose carriers to various early onset cancers, including breast and ovarian. HCT116 BRCA2 -/- human colorectal carcinoma cell line was generated to study the role of BRCA2 in DNA repair, investigate the effects of BRCA2 mutations in a range of cancers, and identify additional functions of the BRCA2 gene. This homozygous knockout cell line shows phenotypes consistent with previous reports, including loss of Rad51 foci in the presence of double-strand breaks, chromosomal rearrangements and elevated sensitivity to the DNA-damaging agents phleomycin and Parp1 inhibitors
Purpose:
Parental cell: HCT 116 cell line
Organism: Human
Tissue: Colon
Model: Knock-Out
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:
Growth properties:
Production details:

Targeted disruption of the human BRCA2 locus in HCT116 cells by homologous recombination. The gene targeting construct was generated by using a recombinant adeno-associated virus (rAAV) system. The deletion was confirmed by Southern Blot and Western Blot using antibodies against the C-terminus of the BRCA2 protein. This cell line was noted as clone 42 by the originating laboratory
Formulation:
Recommended controls: HCT116 parental line
Bacterial resistance:
Selectable markers:
Additional notes: Clone 42 was generated at the same time as clone 46 cited in Xu et al. 2014. J Pathol. 234(3):386-97. PMID: 25043256. The originating laboratory have advised they observed no difference in culture phenotype between clone 42 and clone 46.

Target details

Target: BRCA2 (BReast CAncer gene 2)

Target alternate names:

Target background: BRCA2 is a human tumor suppressor gene found in all humans. The primary role of its protein is in HR-mediated DNA damage repair

Molecular weight:

Ic50:

Applications

Application: Anticancer agents discovery and development; Cytotoxic agents' activity screening; Colony formation assay
Application notes: Clone 42 was generated at the same time as clone 46 cited in Xu et al., 2014. J Pathol. 2014 Nov;234(3):386-97. The originating laboratory have advised they observed no difference in culture phenotype between clone 42 and clone 46.

Handling

Format: Frozen
Concentration:
Passage number:
Growth medium:
Temperature:
Atmosphere:
Volume: 1 ml
Storage medium:
Storage buffer:
Storage conditions: Liquid Nitrogen
Shipping conditions:

Dry ice

Related tools

Related tools: "HCT 116 BRCA2 -/- 46 Cell Line

References

References: Viguier et al. 2015. J Invest Dermatol. 135(2):418-24. PMID: 25207820. ; Peripheral and local human papillomavirus 16-specific CD8+ T-cell expansions characterize erosive oral lichen planus. ; San Jos et al. 1999. J Biol Chem. 274(47):33740-6. PMID: 10559266. ; Receptor engagement transiently diverts the T cell receptor heterodimer from a constitutive degradation pathway. ; Sahuquillo et al. 1998. J Exp Med. 187(8):1179-92. PMID: 9547330. ; T cell receptor (TCR) engagement in apoptosis-defective, but interleukin 2 (IL-2)-producing, T cells results in impaired ZAP70/CD3-zeta association. ; Viney et al. 1992. Hybridoma. 11(6):701-13. PMID: 1284120. ; Generation of monoclonal antibodies against a human T cell receptor beta chain expressed in transgenic mice.