ClonaCell™-HY Medium D

Semi-solid methylcellulose-based medium for hybridoma selection and cloning, with HAT (serum-containing)

Catalog # 03804 90 mL

STEMCELL™ TECHNOLOGIES
Scientists Helping Scientists™ | WWW.STEMCELL.COM
TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM
FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Product Description

ClonaCell™-HY Medium D is a semi-solid methylcellulose-based medium containing serum and the selective agents hypoxanthine, aminopterin, and thymidine (HAT). This medium is used after fusion of lymphocytes and myeloma cells to select and clone hybridomas in one step. Individual parental hybridoma clones and their progeny remain localized together in the semi-solid matrix as they grow to form distinct colonies. This prevents the loss of rare clones by overgrowth from faster-growing cells, as can occur during selection in a liquid medium, and facilitates the isolation of monoclonal colonies. The hybridoma colonies can be easily picked from the semi-solid medium by manual or robotic methods and dispersed into a liquid medium for screening and expansion. This medium has been verified for use in mouse and rat hybridoma development and reportedly is compatible for production and cloning of hybridomas using lymphocytes from a variety of host animals including human, mouse, rat, and hamster.

- Time savings: Hybridoma selection and cloning are combined into one step
- Resource savings: Single-cell derived hybridomas form visible discrete colonies in semi-solid medium, and are easy to pick and transfer to liquid medium for screening and expansion
- Cloning efficiency: Individual cells are suspended and immobilized in semi-solid medium, preventing loss of rare, high-producing clones due to overgrowth

Properties

Storage: Store at -20°C.

Shelf Life: Stable until expiry date (EXP) on label.

Contains:
- DMEM
- Methylcellulose
- Pre-selected serum
- Hypoxanthine, aminopterin, and thymidine (HAT)
- Gentamicin
- 2-Mercaptoethanol
- Phenol red
- L-Glutamine and other supplements
- Other ingredients

Handling / Directions For Use

1. Thaw ClonaCell™-HY Medium D at room temperature (15 - 25°C) or overnight at 2 - 8°C. Mix well.
   NOTE: Do not thaw ClonaCell™-HY Medium D in a 37°C water bath.
2. If ClonaCell™-HY Medium D is not used immediately, store at 2 - 8°C for up to 2 weeks. Alternatively, aliquot and store at -20°C until expiry date as indicated on the label.

For further information, refer to the Technical Manual: ClonaCell™-HY: A Complete Workflow for Hybridoma Generation (Document #28411), available at www.stemcell.com or contact us to request a copy.

References

Berry JD et al. (2004) Development and characterisation of neutralising monoclonal antibody to the SARS-coronavirus. J Virol Methods 120(1): 87–96.
Cabral TM et al. (2014) Development of neutralizing monoclonal antibodies against the pandemic H1N1 virus (2009) using plasmid DNA immunogen. J Virol Methods 195: 54–62.
Chen Y et al. (2007) Armed antibodies targeting the mucin repeats of the ovarian cancer antigen, MUC16, are highly efficacious in animal tumor models. Cancer Res 67(10): 4924–32.

Chen ZC et al. (2000) Genes coding evolutionary novel anti-carbohydrate antibodies: Studies on anti-Gal production in alpha 1,3galactosyltransferase knock out mice. Mol Immunol 37(8): 455–66.
Chronopoulou E et al. (2014) Hybridoma technology for the generation of rodent mAbs via classical fusion. Methods Mol Biol 1131: 47–70.
Date Y et al. (2014) Label-free impedimetric immunoassay for trace levels of polychlorinated biphenyls in insulating oil. Anal Chem 86(6): 2989–96.
Holtzinger A et al. (2015) New markers for tracking endoderm induction and hepatocyte differentiation from human pluripotent stem cells. Development 142(24): 4253–65.
Loveless BC et al. (2011) Structural characterization and epitope mapping of the glutamic acid/alanine-rich protein from Trypanosoma congolense: Defining assembly on the parasite cell surface. J Biol Chem 286(23): 20658–65.
Okai S et al. (2016) High-affinity monoclonal IgA regulates gut microbiota and prevents colitis in mice. Nat Microbiol 1(9): 16103.
Spanier JA et al. (2016) Efficient generation of monoclonal antibodies against peptide in the context of MHCII using magnetic enrichment. Nat Commun 7: 11804.
Stern HM et al. (2010) Development of immunohistochemistry assays to assess GALNT14 and FUT3/6 in clinical trials of dulanermin and drozitumab. Clin Cancer Res 16(5): 1587–96.
Sun Y et al. (2016) Deletion of a Yci1 domain protein of Candida albicans allows homothallic mating in MTL heterozygous cells. MBio 7(2): e00465-16.
Tan GS et al. (2014) Characterization of a broadly neutralizing monoclonal antibody that targets the fusion domain of Group 2 influenza A virus hemagglutinin. J Virol 88(23): 13580–92.
Ulbrandt ND et al. (2006) Isolation and characterization of monoclonal antibodies which neutralize human metapneumovirus in vitro and in vivo. J Virol 80(16): 7799–806.
Wilson JR et al. (2016) An influenza A virus (H7N9) anti-neuraminidase monoclonal antibody with prophylactic and therapeutic activity in vivo. Antiviral Res 135: 48–55.
Young J et al. (2015) A novel immunoassay to measure total serum lymphotoxin-α levels in the presence of an anti-LTα therapeutic antibody. J Immunol Methods 424: 91–9.