

RBL-2H3 RBL-2H3 | 305194

DESCRIPTION

Description
RBL-2H3 is a rat mastocytoma cell line. It is a highly tumorigenic cell line that is used for the study of mast cell biology and as a model for allergic diseases. RBL-2H3 cells are derived from a rat mastocytoma and are characterized by their ability to degranulate and release histamine and other mediators in response to various stimuli. RBL-2H3 cells are used in a wide range of assays, including histamine release assays, cytokine production assays, and cell death assays. RBL-2H3 cells are also used in the study of mast cell activation and signaling pathways. RBL-2H3 cells are maintained in culture in the presence of 10% fetal bovine serum (FBS) and are typically grown in 96-well plates. RBL-2H3 cells are a valuable tool for the study of mast cell biology and for the development of new therapies for allergic diseases.

Organism Rat

Tissue Mast cell

Disease Mastocytosis

Synonyms RBL2H3, RBL 2H3, RBL 2H3, RBL.2H3

PHYSICAL CHARACTERISTICS

Breed/Subspecies Rat

Morphology Round, clonal

Growth properties Adherent

IDENTIFICATION

Citation RBL-2H3 (ATCC CCL-221) | 305194

Biosafety level 1

NCBI_TaxID 10116

CellosaurusAccession CVCL_0591

CONTACT INFORMATION

CONTACT

RBL-2H3 RBL-2H3 | 305194

Culture Medium EMEM (MEM Eagle) 2 mM L-Glutamine-2-Mercaptoethanol 2.2 mM/100mM NaHCO3 EBSS (Gibco 820100a)

Supplements 10 mM β-mercaptoethanol 1 mM β-mercaptoethanol

Dissociation Reagent Trypsin

Subculturing 100% Serum Free Medium (SFM) PBS

Split ratio 1:2 1:4

Fluid renewal 2 3 days

Freeze medium Serum Free Medium (SFM) + 10% DMSO

- Thawing and Culturing Cells**
1. Thaw cells in a 37°C water bath.
 2. Centrifuge cells at 300 x g for 3 minutes.
 3. Wash cells in PBS with 10 mM HEPES, 10 mM NaHCO3, 10 mM NaCl, 5 mM KCl, 10 mM CaCl2, 10 mM MgSO4, 10 mM NaH2PO4, 10 mM Na2HPO4, 10 mM Na2SO4, 10 mM NaCl, 10 mM CaCl2, 10 mM MgSO4, 10 mM NaH2PO4, 10 mM Na2HPO4, 10 mM Na2SO4.
 4. Resuspend cells in SFM with 10% FBS.
 5. Seed cells into a 24-well plate at 15 x 10^4 cells per well.
 6. Incubate cells for 70% confluency.
 7. Wash cells in PBS.
 8. Seed cells into a 24-well plate at 10 x 10^4 cells per well.

Incubation Atmosphere 37°C 5% CO2

Flask Coating None

