# Resource Summary Report

Generated by RRID on Sep 8, 2026

## LCL 721.221

RRID:CVCL_6263
Type: Cell Line

### Proper Citation

RRID:CVCL_6263

### Cell Line Information

**URL:** https://web.expasy.org/cellosaurus/CVCL_6263

**Proper Citation:** RRID:CVCL_6263

**Description:** Cell line LCL 721.221 is a Transformed cell line with a species of origin Homo sapiens (Human)

**Sex:** Female

**Defining Citation:** PMID:2785140, PMID:3257565

**Comments:** Characteristics: Does not express HLA-A, HLA-B and HLA-C. The absence of class I HLA expression allows for functional analysis of individual classI antigens via transformation with individual HLA genes (Millipore=SCC275)., Part of: International Histocompatibility Workshop cell lines.

**Category:** Transformed cell line

**Organism:** Homo sapiens (Human)

**Name:** LCL 721.221

**Synonyms:** 721.221, .221

**Cross References:** EFO:EFO_0022622, ATCC:CRL-1855, BioSample:SAMN03471255, CCRID:1101HUM-PUMC000517, IHW:IHW00001, Lonza:176, Millipore:SCC275, PRIDE:PXD006455, PRIDE:PXD025499, TOKU-E:4103, Wikidata:Q54902215

**ID:** CVCL_6263

**Hierarchy:** cvcl_d327

**Record Creation Time:** 20220427T220721+0000

**Record Last Update:** 20260905T181014+0000

## Ratings and Alerts

No rating or validation information has been found for LCL 721.221.

Warning: Discontinued: ATCC; CRL-1855
Characteristics: Does not express HLA-A, HLA-B and HLA-C. The absence of class I HLA expression allows for functional analysis of individual classI antigens via transformation with individual HLA genes (Millipore=SCC275)., Part of: International Histocompatibility Workshop cell lines.

## Data and Source Information

**Source:** Cellosaurus

## Usage and Citation Metrics

We found 22 mentions in open access literature.

**Listed below are recent publications.** The full list is available at RRID .


Thangaraj JL, et al. (2026) Improved expansion of peripheral blood and iPSC-derived natural killer cells for clinical applications. Cell reports methods, 6(6), 101422.

Brennan K, et al. (2026) Circulating natural killer cells are phenotypically and functionally altered in age-related macular degeneration. Cell reports. Medicine, 7(6), 102792.

Calescibetta A, et al. (2026) Combining lenalidomide with IL-2 family of cytokines enhances activating receptor and perforin/granzyme expression in NK cells. PloS one, 21(3), e0344471.

Gumpert N, et al. (2026) Recurrent Immunogenic Neoantigens and Their Cognate T-cell Receptors in Treatment-Resistant Metastatic Prostate Cancer. Cancer discovery, 16(2), 250.

Maskalenko NA, et al. (2025) The Fc?RIIIA (CD16) L48-H/R Polymorphism Enhances NK Cell-Mediated Antibody-Dependent Cellular Cytotoxicity by Promoting Serial Killing. Cancer immunology research, 13(3), 417.

Mensching L, et al. (2025) HIV-1 infection of macrophages differentially primes NK-cell cytotoxicity and proinflammatory cytokine production. iScience, 28(7), 112879.

Li Y, et al. (2024) A Thermo-responsive collapse system for controlling heterogeneous cell localization, ratio and interaction for three-dimensional solid tumor modeling. bioRxiv : the preprint server for biology.

Zhuang X, et al. (2024) Functional genomics identifies N-acetyllactosamine extension of complex N-glycans as a mechanism to evade lysis by natural killer cells. Cell reports, 43(4), 114105.

Tian J, et al. (2024) ILT2 and ILT4 Drive Myeloid Suppression via Both Overlapping and Distinct Mechanisms. Cancer immunology research, 12(5), 592.

Galaski J, et al. (2024) Fusobacterium nucleatum subsp. nucleatum RadD binds Siglec-7 and inhibits NK cell-mediated cancer cell killing. iScience, 27(6), 110157.

Sabag B, et al. (2024) Dysfunctional natural killer cells can be reprogrammed to regain anti-tumor activity. The EMBO journal, 43(13), 2552.

Ade CM, et al. (2023) Identification of neoepitope reactive T-cell receptors guided by HLA-A*03:01 and HLA-A*11:01 immunopeptidomics. Journal for immunotherapy of cancer, 11(9).

Iizuka A, et al. (2023) Generation of novel complete HLA class I monoallelic cell lines used in an MHC stabilization assay for neoantigen evaluation. Oncology letters, 26(2), 324.

Kotzur R, et al. (2023) Eradication of CD48-positive tumors by selectively enhanced YTS cells harnessing the lncRNA NeST. iScience, 26(8), 107284.

Fittje P, et al. (2022) HIV-1 Nef-mediated downregulation of CD155 results in viral restriction by KIR2DL5+ NK cells. PLoS pathogens, 18(6), e1010572.

Vollmers S, et al. (2022) Host KIR/HLA-C Genotypes Determine HIV-Mediated Changes of the NK Cell Repertoire and Are Associated With Vpu Sequence Variations Impacting Downmodulation of HLA-C. Frontiers in immunology, 13, 922252.

Pánisová E, et al. (2022) Reduced frequency of cytotoxic CD56dim CD16+ NK cells leads to impaired antibody-dependent degranulation in EBV-positive classical Hodgkin lymphoma. Cancer immunology, immunotherapy : CII, 71(1), 13.

Höfle J, et al. (2022) Engagement of TRAIL triggers degranulation and IFN? production in human natural killer cells. EMBO reports, 23(8), e54133.

Ben-Shmuel A, et al. (2022) Inhibition of SHP-1 activity by PKC-? regulates NK cell activation threshold and cytotoxicity. eLife, 11.

Crespo ÂC, et al. (2020) Decidual NK Cells Transfer Granulysin to Selectively Kill Bacteria in Trophoblasts. Cell, 182(5), 1125.