

KU812 | 305306

General information

Description	KU812 is a human myeloid leukemia cell line derived from a patient with chronic myeloid leukemia (CML) in the blast phase. It is characterized by the presence of the BCR-ABL1 fusion gene and is used for studying the pathogenesis and treatment of CML. KU812 cells are highly proliferative and can be maintained in suspension culture. (CARPA) is a European consortium for the study of CML. KU812 is a member of the CML cell line panel. KU812 is a human myeloid leukemia cell line derived from a patient with chronic myeloid leukemia (CML) in the blast phase. It is characterized by the presence of the BCR-ABL1 fusion gene and is used for studying the pathogenesis and treatment of CML. KU812 cells are highly proliferative and can be maintained in suspension culture.
Organism	Human
Tissue	Leukemia
Disease	Chronic myeloid leukemia (CML), BCR-ABL1 fusion
Synonyms	Ku812, KU-812, KU.812, KU 812

Cell characteristics

Age	38 years
Gender	Male
Ethnicity	Chinese
Morphology	Leukemic cells
Cell type	Myeloid leukemia cells
Growth properties	Highly proliferative

Cell line identification

Citation	KU812 (Cytion 305306)
Biosafety level	1
NCBI_TaxID	9606
CellosaurusAccession	CVCL_0379

Product sheet

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Cell line: KU812 - BCR-ABL1

Antigen expression	CD3, ANPEP (CD13)
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Mutational profile	TP53, p.Lys132Arg (c.395A>G), BCR-ABL1, BCR-ABL1 (c.395A>G)
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Karyotype	Ph1 (BCR-ABL1)
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Cell line

Culture Medium	RPMI 1640, w: 2.0 mM NaHCO_3 (Cytion 820700a)
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Supplements	10% FBS, 2.5 $\mu\text{g}/\text{mL}$ HEPES
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Subculturing	15 μL PBS (3-5 $\times 10^5$ cells)
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Seeding density	3×10^5 cells/ mL
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Fluid renewal	2-3 $\times 10^5$ cells
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Freeze medium	FBS + 10% DMSO
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**Thawing and
Culturing Cells**

1. **Thawing:** Thaw the cells quickly in a water bath at 37°C. Transfer the cells to a pre-warmed medium.
2. **Seeding:** Seed the cells into a pre-warmed medium. Incubate at 37°C for 24 hours.
3. **Media Change:** Replace the medium with fresh pre-warmed medium.
4. **Passaging:** Pass the cells into a new flask when they reach 70% confluency.
5. **Freezing:** Freeze the cells in a freezing medium and store at -80°C.
6. **Thawing:** Thaw the cells quickly in a water bath at 37°C. Transfer the cells to a pre-warmed medium.
7. **Seeding:** Seed the cells into a pre-warmed medium. Incubate at 37°C for 24 hours.
8. **Media Change:** Replace the medium with fresh pre-warmed medium.

**Incubation
Atmosphere**

37°C, 5% CO₂, humidified

Flask Coating

Yes

**Freezing
Procedure**

Freeze the cells in a freezing medium and store at -80°C.

**Shipping
Conditions**

Ship the cells in a cooling box with dry ice at -78°C.

**Storage
Conditions**

Store the cells in a freezing medium at -150°C for 196 hours.

Sterility

The cells are sterile and free of mycoplasmas. PCR screening confirmed the absence of mycoplasmas.