

Product sheet

Wilms1 | 300411

General Information

Description	Wilms1 is a protein-coding gene located on chromosome 11p15.5. It is a member of the Wilms tumor gene family. The protein product of this gene is involved in the development of the kidney and is a tumor suppressor. Mutations in this gene are associated with Wilms tumor, a type of kidney cancer that primarily affects children. The gene is also known as WT1.
Organism	Homo sapiens
Tissue	Embryonic kidney, Kidney, Testis
Applications	Western blotting, RT-PCR, Immunoprecipitation, Immunofluorescence
Synonyms	WT1, WT1-1, WT1-2

Characteristics

Age	Embryonic
Gender	Male
Ethnicity	Not applicable
Morphology	Epithelial
Cell type	Epithelial cell
Growth properties	Adherent

References

Citation	Wilms1 (WT1) Cytion 300411
Biosafety level	1
NCBI_TaxID	9606
CellosaurusAccession	CVCL_A5SC

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Cell Line

Receptors expressed EGFR, EphA7, PDGFRalpha, FGFR1, PDGFRbeta, AxL

Tumorigenic Yes, tumorigenic in nude mice. Xenografts in nude mice show high tumorigenicity (subcutaneous injection of 10⁶ cells into the flanks of nude mice results in tumor formation within 4-6 weeks).

Viruses HIV-1: Susceptible, HBV: Susceptible, HCV: Susceptible

Mutational profile WT1: c. 149 C>A, p.S50x, LOH: 11p11-11pter, CTNNB1: TCT>TTT, p.S45F

Karyotype 46, XY

Media

Culture Medium MSCGM (Lonza)

Dissociation Reagent Trypsin

Doubling time 24 hours

Subculturing Cells are cultured in MSCGM medium supplemented with 10% FBS. For subculturing, cells are trypsinized and resuspended in PBS. Cells are seeded at a density of 1 x 10⁴ cells per well in 25 cm² flasks.

Seeding density 1 x 10⁴ cells/cm²

Fluid renewal 1:2 medium change

Post-Thaw Recovery 100%

Freeze medium MSCGM medium supplemented with 10% FBS + 10% DMSO

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Thawing and Culturing Cells

1. Thaw the cells rapidly in a water bath at 37°C. Transfer the cells to a pre-warmed medium.
2. Centrifuge the cells at 300 x g for 3 minutes. Resuspend the cells in pre-warmed medium.
3. Seed the cells into a pre-warmed flask containing 15 mL of medium. Incubate at 37°C with 5% CO₂.
4. Monitor cell growth and confluency. Harvest cells when they reach 70-80% confluency.
5. Harvest cells by trypsinization. Seed cells into a new flask with 15 mL of medium.
6. Incubate cells at 37°C with 5% CO₂ until they reach 70-80% confluency.
7. Harvest cells by trypsinization. Seed cells into a new flask with 10 mL of medium.
8. Incubate cells at 37°C with 5% CO₂ until they reach 70-80% confluency.

Incubation Atmosphere 37°C, 5% CO₂, humidified air

Flask Coating No coating

Freezing Procedure Harvest cells and resuspend in freezing medium. Store at -80°C.

Shipping Conditions Store at -80°C.

Storage Conditions Store at -150°C for 196 days.

Genotype / HLA

Sterility Cells are tested for mycoplasma contamination. PCR testing is performed. Results are negative.

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HLA

A*: '03:01:01, '24:02:01

B*: '35:03:01, '38:01:01

C*: 12:03:01

DRB1*: 07:01:01, 14:54:01

DQA1*: '01:04:01, '02:01:01

DQB1*: '02:02:01, '05:03:01

DPB1*: '02:01:02G, '04:02:01G

E: 01:03:01, 01:03:02