

Wilms1 | 300411

General Information

Description	Wilms1 is a protein-coding gene located on chromosome 11p15.5. It is a member of the Wilms tumor family of genes. 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 involved in the regulation of cell growth and differentiation.
Organism	Human
Tissue	Kidney
Applications	Western blotting, RT-PCR, Immunofluorescence, Immunohistochemistry
Synonyms	WT1, WT1-1, WT1-2

Characteristics

Age	0-100
Gender	Male, Female
Ethnicity	European, African, Asian
Morphology	Transmembrane protein
Cell type	Epithelial cells
Growth properties	Adherent

References and Safety

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

Product sheet

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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 containing 10% FBS. Cells are seeded into T25 flasks at 1-3 x 10⁵ cells per flask in 5 ml of medium.

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 vial rapidly in a 37°C water bath. Transfer the cells to a pre-warmed medium.
2. Centrifuge at 300 x g for 3 minutes. Resuspend in 15 ml of pre-warmed medium.
3. Seed cells into a 75 cm² flask containing 37 ml of pre-warmed medium.
4. Incubate at 37°C in 5% CO₂ until cells reach 70% confluency.
5. Harvest cells by trypsinization. Seed into a 15 ml tube containing 8 ml of medium.
6. Centrifuge at 300 x g for 3 minutes. Resuspend in 3 ml of medium.
7. Seed into a 10 ml tube containing 10 ml of medium. Incubate at 37°C in 5% CO₂.
8. Harvest cells by centrifugation at 150 x g for 5 minutes. Resuspend in 196 µl of medium.

Incubation Atmosphere 37°C, 5% CO₂, humidified

Flask Coating Cell culture flasks are pre-coated with poly-L-lysine.

Freezing Procedure Harvest cells by trypsinization. Seed into a 15 ml tube containing 8 ml of medium. Incubate at 37°C in 5% CO₂.

Shipping Conditions Cells can be shipped at -78°C.

Storage Conditions Cells can be stored at -150°C for 196 days.

Genotype / Phenotype / HLA

Sterility Cells are tested for mycoplasma contamination using PCR.

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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