

Cell Line Data Sheet for SMS-KAN

Disease: Neuroblastoma
Phase of Therapy: Diagnosis
Treatment:
Disease Stage: 4
Gender: Female
Age at diagnosis: 36 months
Race: N/A
Age at sample collection: N/A
Source of Culture: Primary Tumor
Primary Tumor Site: Pelvis
Date Established: October 1978

MYCN Patient: Amplified
MYCN Cell line: N/A
TH mRNA: Positive
p53 functionality: Functional
Telomere Mechanism: N/A
ALK: WT

IC90 (DIMSCAN*):	<u>CBDCA (µg/ml)</u>	<u>CDDP (µg/ml)</u>	<u>DOX (ng/ml)</u>	<u>ETOP (ng/ml)</u>	<u>L-PAM (µg/ml)</u>
*see reference 4	2.2	0.3	34.8	146	0.6

CBDCA, carboplatin; CDDP, cisplatin; DOX, doxorubicin; ETOP, etoposide; L-PAM, melphalan

Growth Conditions: Please see Protocols section at <https://www.cccells.org/protocols.php>
5% CO₂, 20% O₂, 37.0°C

Media Formulation: Please see Protocols section at <https://www.cccells.org/protocols.php>
Cells are grown in a base medium of Iscove's Modified Dulbecco's Medium plus the following supplements (to a final concentration): 20% Fetal Bovine Serum, 4mM L-Glutamine, 1X ITS (5 µg/mL insulin, 5 µg/mL transferrin, 5 ng/mL selenous acid)

Doubling Time: 95 hours
Growth Properties: Round, teardrop-shaded neuroblasts, adherent and suspended cells, grow mostly in clumps

STR Profile: May be obtained at <https://strdb.cccells.org/>

Notes: The Childhood Cancer Repository has a matching cell line available from this same patient – SMS-KANR.

All COG Repository cell lines are antibiotic-free, mycoplasma-free, and cryopreserved in 50% FBS / 7.5% DMSO. Each vial label contains the cell line name, passage number, total viable cell count (usually 5-10e6), the overall cell viability, and date frozen. All cell lines are validated with original patient sample by STR analysis.



Cell Line Data Sheet for SMS-KAN

References:

1. Reynolds CP, Biedler JL, Spengler BA, Reynolds DA, Ross RA, Frenkel EP, Smith RG: Characterization of human neuroblastoma cell lines established before and after therapy. *J Natl Cancer I.* 76:375-387, 1986. PubMed ID: 3546456
<https://www.sciencedirect.com/science/article/pii/S0002817787420187?via%3Dihub>
2. Reynolds CP, Brodeur GM, Tomayko MM, Donner L, Helson L, Seeger RC, Triche TJ: Biological classification of cell lines derived from human extra-cranial neural tumors. *Prog Clin Biol Res.* 271:291-306, 1988. PubMed ID: 3406003
<https://pubmed.ncbi.nlm.nih.gov/3406003/>
3. Keshelava N, Seeger RC, Groshen S, Reynolds CP: Drug resistance patterns of human neuroblastoma cell lines derived from patients at different phases of therapy. *Cancer Research.* 58:5396-5405, 1998. PubMed ID: 9850071
<https://cancerres.aacrjournals.org/content/58/23/5396.long>
4. Wang Y, Einhorn P, Triche TJ, Seeger RC, Reynolds CP. Expression of Protein Gene Product 9.5 and Tyrosine Hydroxylase in Childhood Small Round Cell Tumors. *Clin Cancer Res.* 6, 551-558, 2000. PubMed ID: 10690538
<https://clincancerres.aacrjournals.org/content/6/2/551.long>
5. Keshelava N, Groshen S, Reynolds CP. Cross-resistance of topoisomerase I and II inhibitors in neuroblastoma cell lines. *Cancer Chemoth Pharm.* 45: 1-8, 2000. PubMed ID: 10647494
<https://link.springer.com/article/10.1007%2FPL00006736>
6. Thompson PM, Maris JM, Hogarty MD, Seeger RC, Reynolds CP, Brodeur GM, White PS. Homozygous deletion of CDKN2A (p16INK4a/p14ARF) but not within 1p36 or at Other Tumor Suppressor Loci in Neuroblastoma. *Cancer Res.* 61, 679-686, 2001. PubMed ID: 11212268
<https://cancerres.aacrjournals.org/content/61/2/679.long>
7. Frgala T, Kalous O, Proffitt RT, Reynolds CP: A novel cytotoxicity assay with a 4 log dynamic range that identifies synergistic drug combinations. *Mol Cancer Ther.* 6:886-89, 2007. PubMed ID: 17363483
<https://mct.aacrjournals.org/content/6/3/886.long>
8. Thiele, Carol J., McKeon, Catherine, Triche, Timothy J., Ross, Robert A., Reynolds, C. Patrick, and Israel, Mark A. (1987). Differential Protooncogene Expression Characterizes Histopathologically Indistinguishable Tumors of the Peripheral Nervous System. *J Clin Invest* 80: 804-811. PubMed ID: 2887586
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC442306/>

9. Kang MH, Smith MA, Morton CL, Keshlava N, Houghton PJ, Reynolds CP. National Cancer Institute Pediatric Preclinical Testing Program: Model Description for In Vitro Cytotoxicity Testing. *Pediatr Blood Cancer*. 56: 239-249, 2011. PubMed ID: 20922763 (www.PPTPinvitro.org)
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3005554/>
10. J. L. Harenza, M. A. Diamond, R. N. Adams, M. M. Song, H. L. Davidson, L. S. Hart, M. H. Dent, P. Fortina, C. P. Reynolds, J. M. Maris, Transcriptomic profiling of 39 commonly-used neuroblastoma cell lines. *Sci Data*. 2017;4:170033. PMID: 28350380
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5369315/>

Childhood Cancer Repository
Powered by Alex's Lemonade Stand
COG resource Laboratory
www.ccells.org

2 / 3



Cell Line Data Sheet for SMS-KAN

Cell Line Name: SMS-KAN

Low confluency (10x magnification)

High confluency (10x magnification)

Low confluency (20x magnification)

High confluency (20x magnification)

