Data Sheet

BCRJ Code:	0380
Cell Line:	Y-79
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Eye, retina
Cell Type:	Retinoblastoma
Morphology:	Multicellular clusters
Disease:	Retinoblastoma
Growth Properties:	Suspension
Sex:	Female
Age/Ethinicity:	2 Year / Caucasian
Derivation:	The Y79 line was isolated by T.W. Reid and associates in January 1971 by explant culture of a primary tumor from the right eye obtained immediately after enucleation.
Biosafety:	1
Addtional Info:	The donor had a strong maternal family history of retinoblastoma. Ultrastructural features including nuclear membrane infoldings, triple membrane structures, microtubules, large coated vesicles, centrioles, basal bodies and annulate lamellae were reportedly similar to those of the original tumor.
Culture Medium:	RPMI-1640 medium modified to contain 2 mM L-glutamine, 4500 mg/L glucose with fetal bovine serum to a final concentration of 20%.

Subculturing:	Allow aggregates to settle to the bottom of the flask. Remove supernatant and discard. Add fresh medium, aspirate and dispense into new flasks.
Subculturing Medium Renewal:	Twice per week
Subculturing Subcultivation Ratio:	1:2 to 1:4 is recommended
Culture Conditions:	Atmosphere: air, 95%; carbon dioxide (CO2), 5%
Cryopreservation:	95% FBS + 5% DMSO (Dimethyl sulfoxide)
Thawing Frozen Cells:	SAFETY PRECAUTION: Is highly recommend that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vessel exploding or blowing off its cap with dangerous force creating flying debris. 1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the Oring and cap out of the water. Thawing should be rapid (approximately 2 minutes). 2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions. 3. For cells that are sensitive to DMSO is recommended that the cryoprotective agent be removed immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL complete culture medium and spin at approximately 125 x g for 5 to 7 minutes. 4.Discard the supernatant and Resuspend cell pellet with the recommended complete medium (see the specific batch information for the culture recommended dilution ratio). 5. Incubate the culture in a appropriate atmosphere and temperature (see "Culture Conditions" for this cell line). NOTE: It is important to avoid excessive alkalinity of the medium during recovery of the cells. It is suggested that, prior to the addition of the vial contents, the culture vessel containing the growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0 to 7.6).

References:	Reid TW, et al. Characteristics of an established cell line of retinoblastoma. J. Natl. Cancer Inst. 53: 347-360, 1974. PubMed: 4135597 Rostomily RC, et al. Expression of neurogenic basic helix-loop-helix genes in primitive neuroectodermal tumors. Cancer Res. 57: 3526-3531, 1997. PubMed: 9270024 Wong HK, Ziff EB. The human papillomavirus type 16 E7 protein complements adenovirus type 5 E1A amino-terminus-dependent trasactivation of adenovirus type 5 early genes and increases ATF and Oct-1 DNA binding activity. J. Virol. 70: 332-340, 1996. PubMed: 8523545
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