

## Plant Cultured Cell Lines Preserved in RIKEN BRC\*

Plant name	Cell line	BRC No.	Species	Specific features (provided by the depositors)	Medium type	Restriction**
Amaranth	H440	<a href="#">rpc00065</a>	<i>Amaranthus</i>	Cells maintained without plant hormones, betacyanin production (dark red)	gellan gum	
<i>Arabidopsis</i>	T87	<a href="#">rpc00008</a>	<i>Arabidopsis thaliana</i>	Accession Columbia, partial chloroplast development under the light condition	liquid	
	YG1	<a href="#">rpc00050</a>	<i>Arabidopsis thaliana</i>	Accession Columbia, cells maintained under the dark condition	liquid	b
	gnom	<a href="#">rpc00055</a>	<i>Arabidopsis thaliana</i>	Cell line derived from <i>gnom</i> mutant	agar	a
	At tom	<a href="#">rpc00056</a>	<i>Arabidopsis thaliana</i>	Accession Columbia <i>tom1</i> (EMS) <i>tom3</i> (EMS) <i>th1</i> (T-DNA) triple mutant, inhibition of tobamovirus multiplication	liquid	b
	MM2d	<a href="#">rpc00103</a>	<i>Arabidopsis thaliana</i>	Cell cycle synchronization, genetic transformation	liquid	a
	MM2d-LS	<a href="#">rpc00104</a>	<i>Arabidopsis thaliana</i>	MM2d-derived cell line, Cell cycle synchronization, genetic transformation [preparing]	liquid	a
	YG1-c	<a href="#">rpc00111</a>	<i>Arabidopsis thaliana</i>	Callus cell line derived from YG1 suspension cell line, cells maintained under the dark condition	gellan gum	
	At tom-c	<a href="#">rpc00112</a>	<i>Arabidopsis thaliana</i>	Callus cell line derived from At tom suspension cell line, inhibition of tobamovirus multiplication	gellan gum	
<i>Asparagus</i>	A.pas	<a href="#">rpc00023</a>	<i>Asparagus pastorianus</i>	–	agar	
	A.per	<a href="#">rpc00022</a>	<i>Asparagus persicus</i>	–	agar	
	A.plo	<a href="#">rpc00024</a>	<i>Asparagus plocamoides</i>	–	agar	
	Asp-86	<a href="#">rpc00010</a>	<i>Asparagus officinalis</i>	[not available]	agar	
<i>Athyrium</i>	AY-01	<a href="#">rpc00100</a>	<i>Athyrium yokoscense</i>	Fern cell line, high cadmium tolerance	liquid	
Bamboo	Pb	<a href="#">rpc00048</a>	<i>Phyllostachys bambusoides</i>	High accumulation of $\beta$ -1,3-glucan in cell wall	liquid	
	Pn	<a href="#">rpc00047</a>	<i>Phyllostachys nigra</i>	High accumulation of $\beta$ -1,3-glucan in cell wall	liquid	
<i>Bruguiera</i>	BsLs	<a href="#">rpc00087</a>	<i>Bruguiera sexangula</i>	Suspension cell line derived from a mangrove species, high salt tolerance	liquid	
Carrot	kurodagosun	<a href="#">rpc00002</a>	<i>Daucus carota</i>	Embryogenic cells	liquid	
	NC	<a href="#">rpc00101</a>	<i>Daucus carota</i>	Non-embryogenic cells	liquid	
<i>Ceratopteris</i>	Cr-AH	<a href="#">rpc00102</a>	<i>Ceratopteris richardii</i>	Fern cell line	liquid	a + b
Cherry tree	Co460	<a href="#">rpc00053</a>	<i>Prunus</i> $\times$ <i>yedoensis</i>	Cells maintained without plant hormones, anthocyanin production (dark red)	gellan gum	
<i>Commelina</i>	TA416	<a href="#">rpc00068</a>	<i>Commelina communis</i>	Cells maintained without plant hormones, anthocyanin production (dark blue)	gellan gum	

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<i>Coptis</i>	Cj	<a href="#">rpc00054</a>	<i>Coptis japonica</i>	High berberine production and accumulation in vacuoles	agar	
	156-S	<a href="#">rpc00069</a>	<i>Coptis japonica</i>	Transgenic cell line over-expressing <i>Coptis SMT</i> gene, high berberine production (yellow)	liquid	
Dandelion	ToF	<a href="#">rpc00064</a>	<i>Taraxacum officinale</i>	Anthocyanin production (dark purple)	agar	
<i>Duboisia</i>	Dm	<a href="#">rpc00059</a>	<i>Duboisia myoporoides</i>	Naringenin glycosylation, tropine acetylation, conversion of L-rhamnose to D-glucose	agar	
<i>Glehnia</i>	GIW	<a href="#">rpc00057</a>	<i>Glehnia littoralis</i>	Anthocyanin-non-producing (white) cells, production of coumarin derivatives by stress treatment	agar	
<i>Glehnia</i>	GIV	<a href="#">rpc00058</a>	<i>Glehnia littoralis</i>	Anthocyanin-producing (violet) cells, production of coumarin derivatives	agar	
Grape	VR	<a href="#">rpc00003</a>	<i>Vitis</i>	High anthocyanin production	agar	
	VW	<a href="#">rpc00004</a>	<i>Vitis</i>	Low anthocyanin production	agar	
	YU-1	<a href="#">rpc00049</a>	<i>Vitis vinifera</i>	Vigorous cell growth	liquid	b
	YU-1-c	<a href="#">rpc00110</a>	<i>Vitis vinifera</i>	Callus cell line derived from YU-1 suspension cell line, vigorous cell growth	gellan gum	
Liquorice	Ge	<a href="#">rpc00060</a>	<i>Glycyrrhiza echinata</i>	Retrochalcone production (yellow) by elicitor treatment	agar	
	Ak-1	<a href="#">rpc00061</a>	<i>Glycyrrhiza echinata</i>	Medicarpin production by elicitor treatment	agar	
<i>Lotus</i>	Lj	<a href="#">rpc00032</a>	<i>Lotus japonicus</i>	[preparing]	liquid	
	LjA	<a href="#">rpc00033</a>	<i>Lotus japonicus</i>	–	agar	
	LjmA	<a href="#">rpc00034</a>	<i>Lotus japonicus</i>	–	agar	
Mint	Mar-1	<a href="#">rpc00013</a>	<i>Mentha arvensis</i>	High alkaline phosphodiesterase activity	agar	
Peach	P468	<a href="#">rpc00066</a>	<i>Prunus persica</i>	Cells maintained without plant hormones, anthocyanin production (dark red)	gellan gum	
Periwinkle	CRA	<a href="#">rpc00014</a>	<i>Catharanthus roseus</i>	–	liquid	
	V208	<a href="#">rpc00015</a>	<i>Catharanthus roseus</i>	Crown gall cells ( <i>Agrobacterium tumefaciens</i> A208), brassinosteroid production	liquid	
	CrB	<a href="#">rpc00107</a>	<i>Catharanthus roseus</i>	Rapid cell proliferation	liquid	
Pokeweed	PAR	<a href="#">rpc00005</a>	<i>Phytolacca americana</i>	High betacyanin production (red)	agar	
	PAP	<a href="#">rpc00006</a>	<i>Phytolacca americana</i>	Moderate betacyanin production (pink)	agar	
	PAW	<a href="#">rpc00007</a>	<i>Phytolacca americana</i>	Low betacyanin production (white)	agar	
Puccoon	M18-1	<a href="#">rpc00037</a>	<i>Lithospermum erythrorhizon</i>	High shikonin production	agar	
	OM	<a href="#">rpc00038</a>	<i>Lithospermum erythrorhizon</i>	Low shikonin production	agar	
Rice	OS-1	<a href="#">rpc00020</a>	<i>Oryza sativa</i>	–	agar	

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	Oc	<a href="#">rpc00031</a>	<i>Oryza sativa</i>	Cells used for nurse culture, phyto-sulphokine- $\alpha$ production, high capacity to convert IAM to IAA	liquid	
Sesame	PSB	<a href="#">rpc00025</a>	<i>Sesamum indicum</i>	–	agar	
	PSW	<a href="#">rpc00026</a>	<i>Sesamum indicum</i>	–	agar	
	PSG	<a href="#">rpc00027</a>	<i>Sesamum indicum</i>	–	agar	
Soybean	DG330	<a href="#">rpc00051</a>	<i>Glycine max</i>	Cells maintained without plant hormones, daidzein and genistein production	gellan gum	
Spinach	Spi-WT	<a href="#">rpc00016</a>	<i>Spinacia oleracea</i>	–	liquid	
	Spi-I-1	<a href="#">rpc00017</a>	<i>Spinacia oleracea</i>	Nitrate reductase deficiency	agar	
	Spi-12F	<a href="#">rpc00018</a>	<i>Spinacia oleracea</i>	Nitrate reductase deficiency	liquid	
Sponge gourd	LcyD6	<a href="#">rpc00028</a>	<i>Luffa cylindrica</i>	–	agar	
	LcyD7	<a href="#">rpc00029</a>	<i>Luffa cylindrica</i>	–	agar	
	Lcy-1	<a href="#">rpc00019</a>	<i>Luffa cylindrica</i>	[not available]	agar	
Strawberry	SB489	<a href="#">rpc00067</a>	<i>Fragaria</i> $\times$ <i>ananassa</i>	Cells maintained without plant hormones, anthocyanin production (dark red)	gellan gum	
Tobacco	G89	<a href="#">rpc00044</a>	<i>Nicotiana glauca</i>	–	agar	
	BY-2	<a href="#">rpc00001</a>	<i>Nicotiana tabacum</i>	Rapid cell proliferation	liquid	
	T-13	<a href="#">rpc00009</a>	<i>Nicotiana tabacum</i>	Coumarin production	liquid	
	Xan-1	<a href="#">rpc00035</a>	<i>Nicotiana tabacum</i>	–	agar	
	BY-2H	<a href="#">rpc00036</a>	<i>Nicotiana tabacum</i>	Habituated BY-2 cell line growing without plant hormones	agar	
	GV7	<a href="#">rpc00039</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing GFP-AtVAM3 that visualizes vacuolar membranes	liquid	a
	GF11	<a href="#">rpc00040</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing GFP-AtFim1 that visualizes actin filaments	liquid	a
	GT16	<a href="#">rpc00041</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing GFP-tubulin $\alpha$ that visualizes microtubules	liquid	a
	TBY2-AtRER1B	<a href="#">rpc00042</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing GFP-AtRer1B that visualizes Golgi bodies	gellan gum	
	3n-3	<a href="#">rpc00043</a>	<i>Nicotiana tabacum</i>	Crown gall cells ( <i>Agrobacterium tumefaciens</i> A208)	agar	
	BY-TIPG	<a href="#">rpc00062</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing NtTIP1;1-GFP that visualizes vacuolar membranes	liquid	a
	NI	<a href="#">rpc00084</a>	<i>Nicotiana tabacum</i>	Photoautotrophic cell line	liquid	
	ATR-r	<a href="#">rpc00085</a>	<i>Nicotiana tabacum</i>	Atrazine- and 3-(3,4-dichlorophenyl)-1,1-dimethylurea-resistant NI cell line	liquid	
NaCl-r	<a href="#">rpc00086</a>	<i>Nicotiana tabacum</i>	NaCl-adapted NI cell line	liquid		

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	TBY2-31/ST	<a href="#">rpc00091</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing GFP-AtSYP31 and ST-mRFP that visualize <i>cis</i> - and <i>trans</i> -Golgi, respectively	liquid	
	TBY2-31/ST(E)	<a href="#">rpc00092</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing estradiol-inducible GFP-AtSYP31 and estradiol-inducible ST-mRFP that visualize <i>cis</i> - and <i>trans</i> -Golgi, respectively	liquid	
	TBY2-41/ST	<a href="#">rpc00093</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing GFP-AtSYP41 and ST-mRFP that visualize <i>trans</i> -Golgi network and <i>trans</i> -Golgi, respectively	liquid	
	TBY2-R31	<a href="#">rpc00095</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing mRFP-AtSYP31 that visualizes <i>cis</i> -Golgi	liquid	
	TBY2-31/41	<a href="#">rpc00097</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing GFP-AtSYP31 and mRFP-AtSYP41 that visualize <i>cis</i> -Golgi and <i>trans</i> -Golgi network, respectively	liquid	
	topless3-GFP	<a href="#">rpc00098</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing NtTPL3-GFP	liquid	
	BY-HR	<a href="#">rpc00109</a>	<i>Nicotiana tabacum</i>	Transgenic BY-2 cell line expressing tobacco histone H2B-tdTomato that visualizes cell nucleus and chromosomes	liquid	
Tomato	Sly-1	<a href="#">rpc00012</a>	<i>Solanum lycopersicum</i>	High alkaline phosphodiesterase activity [preparing]	agar	
	GCR26	<a href="#">rpc00045</a>	<i>Solanum lycopersicum</i>	–	liquid	b
	GCR237	<a href="#">rpc00046</a>	<i>Solanum lycopersicum</i>	Inhibition of viral RNA replication by plant resistance gene <i>Tm-1</i>	liquid	
Turmeric	Cl	<a href="#">rpc00052</a>	<i>Curcuma longa</i>	Rapid cell proliferation, yellow pigment accumulation	agar	
<i>Vinca</i>	Vma-1	<a href="#">rpc00021</a>	<i>Vinca major</i>	–	agar	
Watermelon	Cba-1	<a href="#">rpc00011</a>	<i>Citrullus battich</i>	High alkaline phosphodiesterase activity	agar	
<i>Zinnia</i>	ZE3	<a href="#">rpc00030</a>	<i>Zinnia elegans</i>	–	agar	

\* Web catalog: [https://plant.rtc.riken.jp/resource/cell\\_line/cell\\_line\\_list.html](https://plant.rtc.riken.jp/resource/cell_line/cell_line_list.html)

\*\* The details are provided on the webpage of each cell line in the web catalog. **a**: Not-for-profit academic purpose only **b**: Domestic only

2025.3.12