

A3b. CERTIFICATE OF EMBRYO PRODUCTION FROM CELL LINE

Breed: _____ CELL LINE IDENTIFICATION: _____ Sex: M F

Cell Line Source Animal (does not apply to embryo or fetal cells) Name _____ Reg. No. _____
CC

Production of cell line must have been documented and reported to record agency on Form A3 (Certificate of Source of Nuclear DNA - Cell Line Identification)

Identification of Animal from which Oocytes were aspirated:

Name: _____ No.: _____ Breed: _____ Oocyte Recovery Date: _____
CC Year Month Day

OR Oocyte Identification No: _____ Date Enucleated: _____
Taken from form A3a Year Month Day

Date of Nuclear Transfer: _____
Year Month Day

Passage Number: _____

Total Viable Embryos Produced: _____

No Frozen: _____

Freeze Date: _____
Year Month Day

No. Transferred: _____

Signature: _____ Firm: _____
Leader of Embryo Production Team

ET Code: _____ Phone: () _____

C3. CERTIFICATE OF EMBRYO CLONE FREEZING (see reverse side for coding instructions)

Type of Container: Straw _____ Other _____

Each container labeled to show firm code, breed, reg. no. of donor, freeze date and straw no.

Cane No.	Straw No.	No. Emb./ Straw	No. X Washed	Trypsin Treated	Code Stage	Code Quality	Zona Intact	Cell Line ID	Comments
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Time from recovery to onset of freezing _____ (hrs.) Cryoprotectant and concentration, equilibration, final molality and cooling procedure _____

How Frozen: Seed Temp. _____ Cooling Rate _____ Plunge Temp. _____ Other _____

Recommended method of thawing and dilution _____

Signature _____ Firm _____
Practitioner or Leader of the Embryo Production Team Freezing the Embryos

ET Code _____ Phone () _____

CONDITIONS FOR COMPLETING EMBRYO CERTIFICATES

A3b. Complete one or more certificates of embryo production for each production of embryos from one cell line. The leader of the embryo production team responsible for identifying the breed, the cell line, the oocyte batch number taken from A3a and the procedure record set forth, is attesting to the accuracy of all information when signing this form. Precede registration numbers with the International Standards Organization (ISO) three letter country codes (cc).

C3. Certificate of Embryo Clone Freezing will be completed, with the Certificate of Embryo Production, whenever embryos are frozen. The practitioner or leader of the embryo production team signing this certificate is attesting to the identification of each embryo with container labeling as set forth within the Certificate, along with the accuracy of all other information.

One copy of a complete Certificate of Embryo Clone Transfer with Certificate of Embryo Clone Freezing is submitted to the appropriate breed organization or recording agency as required by the respective organization. This record may be required before resulting animals can be registered or officially identified. One copy should be provided to the owner.

When a frozen embryo changes ownership, it is important that the requirements of the respective breed organization or recording agency responsible for recording the identification of the new owner be followed. This may be required before resulting animals can be registered or officially identified. This would normally be the responsibility of the owner of record.

When frozen embryos are exported, a special application for embryo export is to be submitted to the respective breed organization in the country from which exported, with the appropriate fee.

Use the following codes to describe the embryo, identify the breed and identify the month in all dates.

STAGE OF DEVELOPMENT

No.	Stage
1	Unfertilized
2	2- to 12-cell
3	Early Morula
4	Morula
5	Early Blastocyst
6	Blastocyst
7	Expanded Blastocyst
8	Hatched Blastocyst
9	Expanded Hatched Blastocyst

QUALITY OF EMBRYOS

Code 1.	Excellent or Good
Code 2.	Fair
Code 3.	Poor
Code 4.	Dead or degenerating

Refer to IETS Manual, Third Edition, Chapter 9, for description of codes.

January	JA
February	FE
March	MR
April	AP
May	MY
June	JN
July	JY
August	AU
September	SE
October	OC
November	NO
December	DE

BOVINE

AN - Aberdeen Angus	BZ - Bonsmara	GS - Gascone	MR - Marchigiana	RO - Rotbunte
AB - Abundance	CP - Campine Red Pied	GV - Gelbvieh	ME - Maremmana	SA - Salers
AF - Afrikaner	CN - Canadienne	GI - Gir	MI - Meuse Rhine Issel	SG - Santa Gertudis
AK - Ankole	CB - Charbray	GR - Groninger	MO - Montbeliard	SE - Senapol
AY - Ayrshire	CH - Charolais	GU - Guernsey	MG - Murray Grey	MS - Shorthorn (milking)
BA - Barzona	CA - Chianina	GZ - Guzera	NE - Nelore	SS - Shorthorn (beef - Scotch)
BE - Beefalo	DB - Danish Black & White	HC - Hays Converter	NG - Nguni	SP - Shorthorn (polled)
BF - Beef Friesian	DJ - Danish Jersey	HH - Hereford (horned)	NM - Normande	IS - Shorthorn (Illawarra)
BM - Beefmaster	RW - Danish Red & White	HP - Hereford (polled)	NR - Norwegian Red	SI - Simbrah
BB - Belgian Blue	DE - Devon	SH - Highland (Scotch Highland)	PA - Parthenais	SM - Simmental
BG - Belted Galloway	DR - Dexter	HO - Holstein	PI - Piedmont	DS - South Devon
BD - Blonde D'Aquitaine	DZ - Drakensberger	HY - Hybrid (Alberta Hybrid)	PR - Pie Rouge	SX - Sussex
BX - Boran	FP - East FLEMISH Red Pied	IB - Ibage	PZ - Pinzgauer	TA - Tarentaise
BO - Braford	ER - Eringer	IN - Indu Brasil	RA - Ranger	TG - Tasmanian Grey
BR - Brahman	FA - Flamand	JE - Jersey	AR - Red Angus	TL - Texas Longhorn
BH - Brahmental	FL - Fleckvieh	KB - Kobe (Wagyu)	RB - Red Brangus	TU - Tuli
BL - Braler	FR - Fribourg	LU - Luving	RD - Red Dane (Red Danish, Danish Red)	WB - Welsh Black
BN - Brangus	FB - Friesian (Belgian)	LM - Limousin	WW - Red Holstein	WF - West FLEMISH Red
BU - Braunvieh	DF - Friesian (Dutch)	LR - Lincoln Red	RP - Red Poll	XX - Crossbreds
SB - Brown Swiss (beef)	GA - Galloway (beef)	MA - Maine-Anjou	RN - Romagnola	
BS - Brown Swiss (dairy)	GD - Galloway (dairy)			

CAPRINE

AL - Alpine	AG - Angora	CH - Cashmere	KR - Kalahari Reds	NU - Nubian
TO - Toggenburg	SA - Saanen	BG - Boer	LN - La Mancha	SG - Savanna Goat

EQUINE

AS - American Saddlebred	CL - Clydesdale	MN - Morgan	QH - Quarter Horse	SF - Suffolk Punch
AP - Appaloosa	HA - Hackney (Horse)	PL - Palomino	SE - Shetland	TW - Tennessee Walking
AB - Arabian	HK - Hackney (Pony)	PE - Percheron	SI - Shire	TH - Thoroughbred
BL - Belgian	HU - Hunter	PN - Pinto	SN - Standardbred	WE - Welsh

PORCINE

YO - Yorkshire	DU - Duroc	BK - Berkshire	PE - Pietrain	LW - Large White (British)
LA - Landrace	LC - Lacombe	SO - Spotted	TM - Tamworth	LB - Large Black (British)
HA - Hampshire	PC - Poland Chine	CW - Chester White	WS - Wessex Saddleback	

OVINE

AN - Afrino	DM - Dohne Merino	IL - Ile de France	OX - Oxford	MM - S. African Mutton Merino
BP - Blackhead Persian	DO - Dorset	LE - Leicester	SP - Persian (Speckled/Skilder)	ST - Southdown
BC - Border Cheviot	DR - Dormer	LI - Lincoln	RA - Rambouillet	SU - Suffolk
CO - Columbia	DP - Dorper	ME - Merino	RM - Romnelet	VR - Van Rooy
CR - Corriedale	FN - Finnish Landrace	MT - Montadale	SB - Scottish Blackface	WD - White Dorper
DA - Damara	HA - Hampshire	NC - N. Country Cheviot	SR - Shropshire	