

## Table A1.1. Characterization of pluripotent stem cells (PSCs) tissue stem cells (TSC) and stem cell-derived models (SCM)

This table summarizes the recommendations for the basic characterization of human pluripotent and tissue stem cells, including the timing of any characterization.

Assay	Initial Characterization						Interval			End of Study			Section Reference		
	PSC		TSC		SCM		PSC	TSC	SCM	PSC	TSC	SCM	PSC	TSC	SCM
Authentication (match to donor)	MCB	WCB	MCB	WCB	MCB	WCB									
	R	D*	R	D*	R	D*	repeat at bottlenecks			R			<a href="#">1.3</a>	<a href="#">1.3</a>	<a href="#">1.3</a>
Sterility	R	D*	R	D*	R	D*	observe daily	observe daily	observe daily				<a href="#">1.6.1; 1.6.1b; Appendix 3</a>	<a href="#">1.6.1; 1.6.1b; Appendix 3</a>	<a href="#">1.6.1; 1.6.1b; Appendix 3</a>
Mycoplasma	R	D*	R	D*	R	D*	quarterly	quarterly	quarterly	R			<a href="#">1.6.1; 1.6.1a; Appendix 3</a>	<a href="#">1.6.1; 1.6.1a; Appendix 3</a>	<a href="#">1.6.1; 1.6.1a; Appendix 3</a>
Genomic evaluation	R	D*	R	D*	R	D*	every ~10 passages, or at bottlenecks and/or EoS			D <sup>2</sup>	D <sup>2</sup>	D <sup>2</sup>	<a href="#">3.1; 3.2; Appendix 5</a>	<a href="#">3.1; 3.2; Appendix 5</a>	<a href="#">3.1; 3.2; Appendix 5</a>
Adventitious agents	D <sup>4</sup>		D		D								<a href="#">Appendix 3.2</a>	<a href="#">Appendix 3.2</a>	<a href="#">Appendix 3.2</a>
Confirmation of Cell Type/ Molecular markers	R		R		R								<a href="#">2.2; 2.3; Appendix 4; Tables A4.1; A4.2; A4.3</a>	<a href="#">4.1.1; 4.3.1; 4.3.2</a>	<a href="#">4.1.1; 4.3.1; 4.3.2</a>
Pluripotency (PSCs)	R <sup>3</sup>												<a href="#">2.1; 2.2; 2.3</a>		
Confirmation of genetic modification	R <sup>1</sup>		R		R								<a href="#">3.2.3; 4.4.4</a>	<a href="#">3.2.3; 4.4.4</a>	<a href="#">3.2.3; 4.4.4</a>
Confirmation of disease mutation	R <sup>1</sup>		R		R								<a href="#">4.3.4</a>	<a href="#">4.3.4</a>	<a href="#">4.3.4</a>
Differentiation Potential (TSCs)			R											<a href="#">4.1.1</a>	

R = Recommended

D = Desirable

1: as applicable,

2: recommended at end of study if not performed at intervals

3: for derivation of new cell lines or new culture systems

4: preferred at level of donor

\* desirable for all; strongly recommended for core facilities or when distributing/transferring lines externally

