

Tick cell lines available from the Tick Cell Biobank, March 2024						
Tick species	Cell line name	Instar	Geographical origin	Culture medium	Incubation temperature	Reference
<i>Amblyomma americanum</i>	AAE2	embryo	USA	L-15B300	32 °C	Kurtti et al., 2005
<i>Amblyomma americanum</i>	AAE12	embryo	USA	L-15B300	32 °C	Billeter et al., 2009
<i>Amblyomma sculptum</i>	ASE14	embryo	Brazil	L-15B	28 - 30 °C	Lima-Duarte et al., 2022
<i>Amblyomma variegatum</i>	AVL/CTVM13	Moulting larva	East Africa	L-15/L-15B	32 °C	Bell-Sakyi et al., 2000
<i>Amblyomma variegatum</i>	AVL/CTVM17	Moulting larva	East Africa	L-15/H-Lac/L-15B	32 °C	Bell-Sakyi, 2004
<i>Argas reflexus</i>	ARE/LULS41	Embryo	Germany	L-15	28 °C	Bell-Sakyi et al., 2018, 2022
<i>Carios capensis</i>	CCE1	embryo	USA	L-15B300	32 °C	Mattila et al., 2007
<i>Carios capensis</i>	CCE2	embryo	USA	L-15B	32 °C	Mattila et al., 2007
<i>Dermacentor andersoni</i>	DAE15	embryo	USA	L-15B300	32 °C	Kurtti et al., 2005
<i>Dermacentor andersoni</i>	DAE100T	embryo	USA	L-15B300	32 °C	Simser et al., 2001
<i>Dermacentor albipictus</i>	DALBE3	embryo	USA	L-15B300	32 °C	Policastro et al., 1997
<i>Dermacentor nitens</i>	ANE58	embryo	USA	L-15B300	32 °C	Kurtti et al., 1983
<i>Dermacentor reticulatus</i>	DRE/LULS60	Embryo	Germany	L-15B	28 °C	Bell-Sakyi et al., 2022
<i>Dermacentor variabilis</i>	DVE1	embryo	USA	L-15B300	32 °C	Kurtti et al., 2005
<i>Hyalomma anatolicum</i>	HAE/CTVM8	Embryo	India	L-15/H-Lac	32 °C	Bell-Sakyi, 1991
<i>Hyalomma anatolicum</i>	HAE/CTVM9	Embryo	India	L-15/MEM	32 °C	Bell-Sakyi, 1991
<i>Hyalomma dromedarii</i>	HDE/LURF39	Embryo	East Africa	L-15	28 °C	Bell-Sakyi et al., 2018
<i>Hyalomma lusitanicum</i>	HLE/LULS42	Embryo	Spain	L-15/L-15B	28 °C	Bell-Sakyi et al., 2022
<i>Hyalomma lusitanicum</i>	HLE/LULS43	Embryo	Spain	L-15/H-Lac/L-15B	28 °C	Bell-Sakyi et al., 2022
<i>Hyalomma lusitanicum</i>	HLE/LULS48	Embryo	Spain	L-15/H-Lac/L-15B	28 °C	Bell-Sakyi et al., 2022
<i>Hyalomma scupense</i>	HSE/LULS59	Embryo	Spain	L-15/H-Lac	28 °C	Bell-Sakyi et al., 2022
<i>Ixodes ricinus</i>	IRE/CTVM19	Embryo	England	L-15	28 °C	Bell-Sakyi et al., 2007
<i>Ixodes ricinus</i>	IRE/CTVM20	Embryo	England	L-15/L-15B	28 °C	Bell-Sakyi et al., 2007
<i>Ixodes ricinus</i>	IRE/LUAP46	Embryo	Spain	L-15	28 °C	Bell-Sakyi et al., 2022
<i>Ixodes ricinus</i>	IRE/LULS55	Embryo	Spain	L-15/H-Lac/L-15B	28 °C	Bell-Sakyi et al., 2022
<i>Ixodes ricinus</i>	IRE11	embryo	Germany	L-15B300	32 °C	Simser et al., 2002
<i>Ixodes scapularis</i>	IDE2	embryo	USA	L-15B300	32 °C	Munderloh et al., 1994
<i>Ixodes scapularis</i>	IDE8	embryo	USA	L-15B	32 °C	Munderloh et al., 1994
<i>Ixodes scapularis</i>	IDE12	embryo	USA	L-15B	32 °C	Munderloh et al., 1994
<i>Ixodes scapularis</i>	ISE6	embryo	USA	L-15B300	32 °C	Kurtti et al., 1996

<i>Ixodes scapularis</i>	ISE18	embryo	USA	L-15B300	32 °C	Munderloh et al., 1994
<i>Ornithodoros moubata</i>	OME/CTVM21	Embryo	East Africa	L-15/H-Lac	28 °C	Bell-Sakyi et al., 2009
<i>Ornithodoros moubata</i>	OME/CTVM22	Embryo	East Africa	L-15/H-Lac	28 °C	Bell-Sakyi et al., 2009
<i>Ornithodoros moubata</i>	OME/CTVM24	Embryo	East Africa	L-15	28 °C	Bell-Sakyi et al., 2009
<i>Ornithodoros moubata</i>	OME/CTVM27	Embryo	East Africa	L-15/MEM	28 °C	Bell-Sakyi et al., 2009
<i>Rhipicephalus appendiculatus</i>	RAE/CTVM1	Embryo	Kenya	L-15	28-32 C	Bell-Sakyi, 2004
<i>Rhipicephalus appendiculatus</i>	RAN/CTVM3	Moulting nymph	Kenya	H-Lac	28-32 C	Bekker et al., 2002
<i>Rhipicephalus appendiculatus</i>	RA243	moulting nymph	East Africa	L-15	28 - 32 °C	Varma et al., 1975
<i>Rhipicephalus appendiculatus</i>	RA257	moulting nymph	East Africa	L-15	28 - 32 °C	Varma et al., 1975
<i>Rhipicephalus appendiculatus</i>	RAE25	embryo	Kenya	L-15B	28 - 32 °C	Kurtti and Munderloh, 1982
<i>Rhipicephalus bursa</i>	RBE/LULS62	Embryo	Spain	L-15/H-Lac	28 °C	Bell-Sakyi et al., 2022
<i>Rhipicephalus decoloratus</i>	BDE/CTVM14	Embryo	Kenya	H-Lac	28 °C	Lallinger et al., 2010
<i>Rhipicephalus decoloratus</i>	BDE/CTVM16	Embryo	Kenya	L-15	28 °C	Bell-Sakyi, 2004
<i>Rhipicephalus evertsi</i>	REE/CTVM28	Embryo	South Africa	L-15/MEM	28 °C	Alberdi et al., 2012
<i>Rhipicephalus evertsi</i>	REE/CTVM29	Embryo	South Africa	L-15	28 °C	Alberdi et al., 2012
<i>Rhipicephalus evertsi</i>	REE/CTVM31	Embryo	South Africa	L-15/MEM	28 °C	Alberdi et al., 2012
<i>Rhipicephalus evertsi</i>	REN/PIPA34	Moulting nymph	South Africa	L-15/H-Lac	28 °C	Bell-Sakyi et al., 2018
<i>Rhipicephalus microplus</i>	BME/CTVM2	Embryo	Costa Rica	L-15	28 °C	Bell-Sakyi, 2004
<i>Rhipicephalus microplus</i>	BME/CTVM6	Embryo	Colombia	L-15	28 °C	Bell-Sakyi, 2004
<i>Rhipicephalus microplus</i>	BME/CTVM23	Embryo	Mozambique	L-15	28 °C	Alberdi et al 2012
<i>Rhipicephalus microplus</i>	BME/CTVM30	Embryo	Mozambique	L-15/MEM	28 °C	Alberdi et al., 2012
<i>Rhipicephalus microplus</i>	BME/PIBB36	Embryo	Brazil	L-15	28 °C	Bell-Sakyi et al., 2018
<i>Rhipicephalus microplus</i>	BmVIII-SCC	embryo	Mexico	L-15/MEM	28 - 32 °C	Holman and Ronald, 1980; Holman, 1981
<i>Rhipicephalus microplus</i>	RBME5	embryo	Brazil	L-15B	28 - 30 °C	Lima-Duarte et al., 2021
<i>Rhipicephalus microplus</i>	BME26	embryo	Mexico	L-15B300	32 °C	Kurtti et al., 1988
<i>Rhipicephalus sanguineus</i>	RML-RSE	embryo	USA	L-15/MEM	28 °C	Yunker et al., 1981; Bell-Sakyi et al., 2015
<i>Rhipicephalus sanguineus</i>	RML-15	embryo	USA	L-15/MEM	28 °C	Yunker et al., 1981; Bell-Sakyi et al., 2015
<i>Rhipicephalus sanguineus</i>	RSE8	embryo	USA	L-15/L-15B	32 °C	Kurtti et al., 1982
<i>Rhipicephalus sanguineus</i>	RSE/PILS35	Embryo	France	L-15	28 °C	Koh-Tan et al., 2016

Insect cell lines available from the Tick Cell Biobank, March 2024						
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<i>Aedes aegypti</i>	Aag2	Neonate larva	India	L-15	28 °C	Singh, 1978; Lan and Fallon 1990
<i>Aedes albopictus</i>	U4.4	Neonate larva	India	L-15	28 °C	Singh, 1967; Condreay and Brown, 1986
<i>Aedes albopictus</i>	C6/36	Neonate larva	India	L-15	28 °C	Singh, 1967; Igarashi, 1978
<i>Apis mellifera</i>	AME-711	Embryo	USA	Schneider's insect	32 °C	Goblirsch et al., 2013
<i>Culex pipiens</i>	CPE/LULS50	Embryo	UK	L-15	28 °C	Bell-Sakyi et al., 2021
<i>Culex pipiens</i>	CPL/LULS56	Neonate larva	UK	L-15	28 °C	Bell-Sakyi et al., 2021
<i>Culex quinquefasciatus</i>	Hsu	Embryo	Not known	L-15 or Schneider's Drosophila	28 °C	Hsu et al., 1970
<i>Culicoides nubeculosus</i>	CNE/LULS44	embryo	UK	L-15	28 °C	Bell-Sakyi et al., 2020
<i>Culicoides nubeculosus</i>	CNE/LULS47	embryo	UK	L-15/L-15B	28 °C	Bell-Sakyi et al., 2020
<i>Culicoides sonorensis</i>	KC	embryo	USA	Schneider's Drosophila	28 °C	Wechsler et al., 1991
<i>Lutzomyia longipalpis</i>	LLE/LULS40	embryo	Brazil	L-15/H-Lac/L-15B	28 °C	Bell-Sakyi et al., 2018
<i>Lutzomyia longipalpis</i>	LLE/LULS45	embryo	Brazil	L-15B	28 °C	Bell-Sakyi et al., 2021
<i>Lutzomyia longipalpis</i>	LLL/LULS52	Larva	Brazil	L-15/L-15B	28 °C	Bell-Sakyi et al., 2021
<i>Phlebotomus papatasi</i>	PPL/LULS49	Larva	Turkey	H-Lac/L-15B	28 °C	Bell-Sakyi et al., 2021
<i>Rhodnius prolixus</i>	RPE/LULS53	embryo	Venezuela	L-15	28 °C	Penrice-Randal et al., 2022
<i>Rhodnius prolixus</i>	RPE/LULS57	Embryo	Venezuela	L-15/H-Lac	28 °C	Penrice-Randal et al., 2022
<i>Triatoma infestans</i>	TIE/LULS54	Embryo	Paraguay	L-15	28 °C	Penrice-Randal et al., 2022

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