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Findings

YEX is a potential alternative to Fetal Calf Serum (FCS) for cell culture of hybridoma cells and cryopreservation of cells. We performed a trial assessment of YEX by performing a head-to-head comparison of YEX versus FCS in two different hybridoma cell lines, A1 and A2. In the first experiment, cells were seeded at the same concentration and fed two different media formulations, DMEM supplemented with 10% FCS or 10% YEX; after 5 days of culture, OD450 measurements were made and are presented in Table 1. We performed a second set of experiments that determined YEX is also an effective cryopreservative. In these experiments as shown in Table 2, we found that 90% YEX with 10% DMSO was as effective as 90% FCS with 10% DMSO in terms of cell growth 5 days of culture post-thaw. In summary, we found YEX is a viable alternative to FCS for cell culture and cryopreservation. The data reported below was shared with YEX Inc. on April 10, 2025.

Trials

Table 1. Initial trial of different culture mediums

Media conditions	Clone ID	OD450
10% FCS	A1	1.89
10% FCS	A2	1.94
10% YEX	A1	1.75
10% YEX	A2	1.87

Table 2. Trial with different cryopreservatives and media conditions

Cryopreservative	Media conditions	Clone ID	OD450
90% FCS: 10% DMSO	10% FCS	A1	1.92
90% FCS: 10% DMSO	10% FCS	A2	1.84
90% YEX: 10% DMSO	10% YEX	A1	1.83
90% YEX: 10% DMSO	10% YEX	A2	1.80

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