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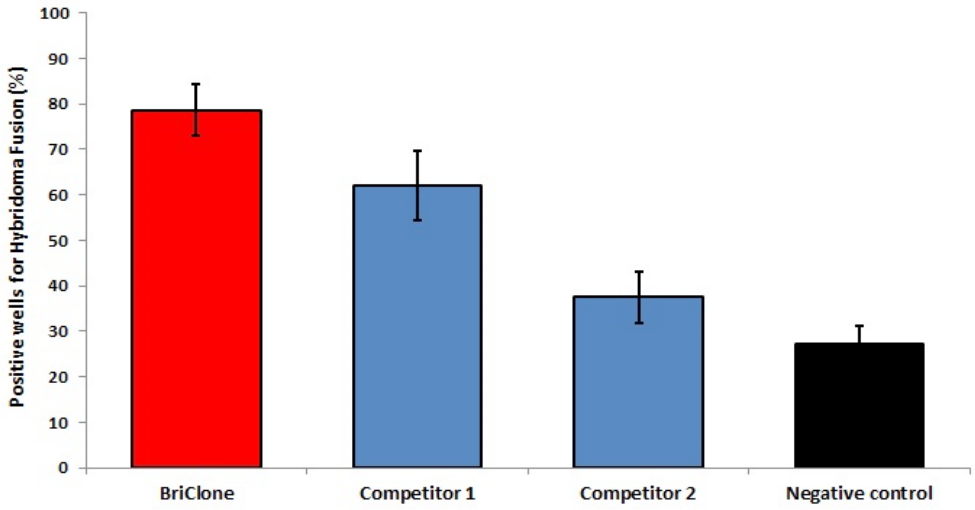
BriClone

Hybridoma Cloning Additive

Product Sheet

BriClone is a hybridoma supplement designed to improve the efficiency and support optimal growth of freshly-fused hybridoma cells during the fusion and post fusion stages of antibody production and under conditions of hybridoma single cell cloning.

Used at 5%, BriClone is the most cost-effective commercially-available hybridoma cloning supplement and is highly efficacious - in the following experiment, BriClone significantly increased the number of positive wells identified with hybridoma clones, when compared to two competitors:



Fusion efficiency expressed as a percentage of wells in 48-well plates with positive hybridoma clones following fusion, relative to BriClone positive control (thawed overnight). Error bars indicate standard deviation (n=3). All supplements used at their recommended concentrations (BriClone: 5%; Competitor 1 & 2: 10%)

Media supplemented with 5% BriClone resulted in an increased percentage of positive wells with hybridoma clones after fusion, when compared to two competitors: 17% increase in hybridoma-positive wells vs. Competitor 1 ($P<0.05$) & 41% increase in hybridoma-positive wells vs. Competitor 2 ($P<0.01$).

Supplementation resulted in increased % of positive wells with hybridoma clones after fusion of 52% (BriClone), 35% (Competitor 1) & 10% (Competitor 2) compared to non-supplemented Neg. control.

Disclaimer: This is a biological product, repeat analysis of the triplicate results shown here may demonstrate some variation.

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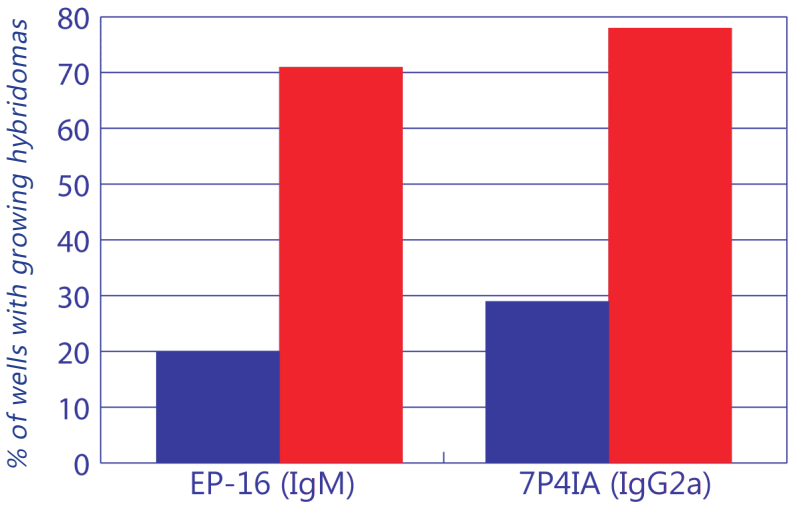


Hybridomas, EP-16 and 7P41A were cloned out under conditions of limiting dilution in the presence of 5% (vol/vol) BriClone and Feeder cells (1 x 10^4 mouse macrophages per well)

BriClone

Feeder

BriClone is an additive for the cloning medium used in the post-fusion stages of hybridoma production and for improving the efficiency of hybridoma cell cloning.

The use of feeder cells to support the outgrowth of hybridomas has many disadvantages, like batch-to-batch variation of the feeder cells and competition between feeder cells & freshly-fused hybridomas for nutrients in the culture medium.

Hybridoma Cloning using BriClone

The hybridomas can be cloned under limiting dilution

1. Grow the hybridomas in your hybridoma growth medium supplemented with 5% BriClone
2. Count the cells and dilute in growth medium supplemented with 5% BriClone to a density of 1 cell/100ul
3. Plate 200ul of cell suspension into each well of a 96 well plate
4. Let the clones grow undisturbed for 10 days at 37˚C

Stability

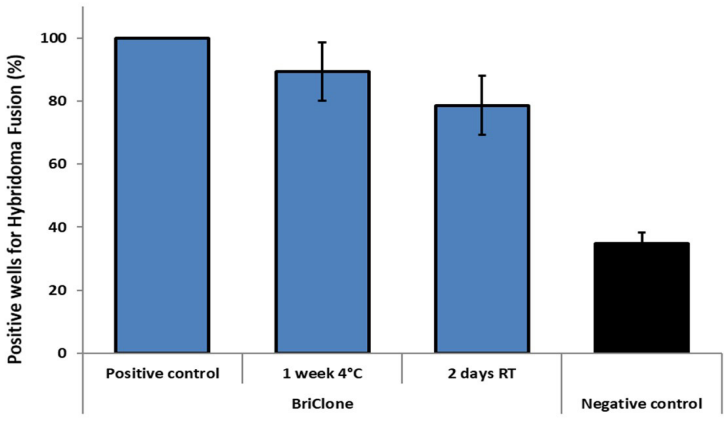
To demonstrate the stability of BriClone, post-fusion hybridoma production was assessed using normal BriClone thawing conditions (overnight at 4°C) as a positive control.

The simulated conditions analysed included one week at 4°C and two days at room temperature.

No significant differences were observed between the simulated transport conditions and the positive control ($P<0.05$) in each case.

Stability of BriClone is therefore not significantly affected following exposure to extended ambient temperatures as may occasionally be observed in transport of the product on ice packs.

Negative control was performed without any supplement.



Fusion efficiency expressed as a percentage of wells in 48-well plates with positive hybridoma clones following fusion, relative to BriClone positive control (thawed overnight). Error bars indicate standard deviation (n=3); RT=Room Temp.