

# Bloodstream-form culture

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## Abstract

**Protocol obtained from the Alsford Lab at the London School of Hygiene & Tropical Medicine**

(<https://blogs.lshtm.ac.uk/alsfordlab/protocols/bloodstream-form-culture/>)

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## Materials

Fetal Bovine Serum, qualified [10437-028](#) by [Life Technologies](#)

Sodium bicarbonate [S6014](#) by [Sigma Aldrich](#)

β -mercaptoethanol M3148 by [Sigma Aldrich](#)

## Protocol

### Step 1.

Make up to 4.5 litres with distilled water, filter sterilise, store at 4°C in 450 ml volumes.

### Step 2.

Prior to use, add 50 ml fetal bovine serum (FBS; Sigma), giving a final concentration of 10% FBS and store at 4°C for up to two months.

### Step 3.

NB: Some early publications indicate that FBS should be heat inactivated at 56°C for 30 minutes prior to use in bloodstream-form *T. brucei* culture – this is not necessary; in fact our unpublished data suggests that using non-inactivated FBS leads to faster, more robust cell growth.

### Step 4.

Cultures should be grown in 5% CO<sub>2</sub> incubator at 37°C, and should not exceed a density of 2.5×10<sup>6</sup> cells per ml.