

## 58: BIFIDOBACTERIUM MEDIUM

This recipe contains strain-specific modifications for *Roseburia hominis* DSM 16839 \*

Casein peptone (tryptic digest)	10.00	g
Yeast extract	5.00	g
Meat extract	5.00	g
Bacto Soytone	5.00	g
Glucose	10.00	g
K <sub>2</sub> HPO <sub>4</sub>	2.00	g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	0.20	g
MnSO <sub>4</sub> x H <sub>2</sub> O	0.05	g
Tween 80	1.00	ml
NaCl	5.00	g
L-Cysteine HCl x H <sub>2</sub> O	0.50	g
<b>Salt solution</b>	40.00	ml
Resazurin (25 mg/100ml)	4.00	ml
<b>Clarified rumen fluid</b>	20.00	ml
<b>Volatile fatty acid mixture</b>	10.00	ml
Distilled water	950.00	ml

The cysteine are added after the medium has been boiled and cooled under CO<sub>2</sub>. Adjust pH to 6.8 using 8 N NaOH. Distribute under N<sub>2</sub> and autoclave.

\* Plus rumenfluid (20ml) plus VFA-Mix; see medium 330 (10ml); anaerobic

### Salt solution

CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.25	g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	0.50	g
K <sub>2</sub> HPO <sub>4</sub>	1.00	g
KH <sub>2</sub> PO <sub>4</sub>	1.00	g
NaHCO <sub>3</sub>	10.00	g
NaCl	2.00	g
Distilled water	1000.00	ml

### Clarified rumen fluid\* (from medium 1310)

Rumen fluid from cow or sheep (obtained from fistulated animals or abattoir refuse) is filtered through muslin, autoclaved at 121°C for 15 min and then centrifuged at 27,000 g for 20 min. The supernatant is made anoxic by sparging with 100% N<sub>2</sub> gas for 15 min, dispensed under same gas atmosphere into anoxic serum vials to 30% of volume and then stored frozen at -20°C.

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### **Volatile fatty acid mixture\*** (from medium 330)

Acetic acid	548.50	ml
Propionic acid	193.50	ml
Butyric acid	129.00	ml
n-Valeric acid	32.25	ml
iso-Butyric acid	32.25	ml
DL-2-Methylbutyric acid	32.25	ml
iso-Valeric acid	32.25	ml