# FILDES ENRICHMENT

### **INTENDED USE**

Remel Fildes Enrichment is recommended for use with a variety of culture media for the cultivation of fastidious microorganisms that require blood derivatives for optimal growth.

## **SUMMARY AND EXPLANATION**

Fildes developed an enrichment medium intended for addition to sterile culture media to enhance the growth of fastidious organisms. This additive, which became known as Fildes Enrichment, is prepared by the action of the enzyme pepsin on defibrinated sheep blood.

### **PRINCIPLE**

Fildes Enrichment provides hemin (X factor), nicotinamide adenine dinucleotide (NAD, V factor), and other nutrients necessary for the growth of *Haemophilus influenzae* and other fastidious bacteria. These factors are derived from the action of pepsin on defibrinated sheep blood. Sodium chloride is a source of essential electrolytes and maintains osmotic equilibrium.

## **REAGENTS (CLASSICAL FORMULA)\***

Sodium Chloride 5.4 g	Sodium Hydroxide70.0	) ml
Pepsin	Hydrochloric Acid Conc24.0	) ml
Sheep Blood	Demineralized Water	) ml

pH 7.0 ± 0.2 @ 25°C

#### **PROCEDURE**

Add Fildes Enrichment to the culture medium according to established laboratory procedures. Optimal results are obtained when Fildes Enrichment is added to culture media in a concentration of 5%. Consult appropriate references for further instructions.<sup>4</sup>

## **QUALITY CONTROL**

All lot numbers of Fildes Enrichment have been tested using the following quality control organisms and have been found to be acceptable. Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, patient results should not be reported.

ONTROL INCUBATION		RESULTS		
Fildes Enrichment in Brain Heart Infusion Broth:				
Haemophilus influenzae ATCC <sup>®</sup> 10211	CO <sub>2</sub> , 18-24 h @ 33-37°C	Growth		
Haemophilus parainfluenzae ATCC® 7901	CO <sub>2</sub> , 18-24 h @ 33-37°C	Growth		

## **BIBLIOGRAPHY**

- 1. Fildes, P. 1920. Br. J. Exp. Pathol. 1:129-130.
- 2. Fildes, P. 1921. Br. J. Exp. Pathol. 2:16-25.
- 3. Willis, A.T. and G. Hobbs. 1959. J. Pathol. Bacteriol. 77:511-521.
- Versalovic, J., K.C. Carroll, G. Funke, J.H. Jorgensen, M.L. Landry, and D.W. Warnock. 2011. Manual of Clinical Microbiology. 10<sup>th</sup> ed. ASM Press, Washington, D.C.

Refer to the front of Remel *Technical Manual of Microbiological Media* for **General Information** regarding precautions, product storage and deterioration, specimen collection, storage and transportation, materials required, quality control, and limitations.

 $\mathsf{ATCC}^{\otimes}$  is a registered trademark of American Type Culture Collection.

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<sup>\*</sup>Adjusted as required to meet performance standards.