

Certificate of Analysis

HALF FRASER (DEMI-FRASER) BROTHLot No: 211792Catalogue No. FBH002/FBH005Exp. Date: MAR.30.2022

SPECIFICATION		EXPECTED RESULTS	ACTUAL RESULTS		
Dehydrated:	Appearance	Homogenous, free-flowing powder	Homogenous, free-flowing powder		
	Color	Beige	Beige		
Prepared:	Clarity	Clear	Clear		
	Color	Yellow	Yellow		
	Precipitate	None to Slight	None to Slight		
<u>pH</u> :		7.2 ± 0.2 @ 25° C	7.1 @ 25°C		

CULTURAL RESPONSE – tested in compliance to ISO 11133:2014 (Fertility and Selectivity Testing)

The medium was prepared according to label directions and 10mL volumes inoculated with the organisms listed below. Cultures were incubated at $30 \pm 1^{\circ}$ C under aerobic atmosphere and examined for growth at 22-26 hours. Following incubation, 10µL of *E. faecalis* and *E. coli* cultures were subcultured onto TSA at $37 \pm 1^{\circ}$ C and examined for growth at 22-26 hours.

		APPROX.	EXPECTED RESULTS		ACTUAL RESULTS			
MICROORGANISM	<u>ATCC</u>	<u>INOCULUM</u> (CFU)	<u>Growth in</u> <u>HF</u>	<u>Reaction</u> <u>in HF</u>	<u>Recovery</u> <u>on TSA</u>	<u>Growth</u> <u>in HF</u>	<u>Reaction</u> <u>in HF</u>	<u>Recovery</u> <u>on TSA</u>
Enterococcus faecalis	29212	> 10 ³	Partial to Complete Inhibition	-	< 100 cfu	Meets Expected Result		
Enterococcus faecalis	19433	> 10 ³	Partial to Complete Inhibition	-	< 100 cfu	Meets Expected Result		l Result
Escherichia coli	25922	> 10 ³	Inhibition	_	< 10 cfu	Meets Expected Result		lResult
Escherichia coli	8739	> 10 ³	Inhibition	_	< 10 cfu	Meets Expected Result		lResult
Listeria innocua	33090	10-100	Growth	Blackening	NA	Meets Expected Result		lResult
Listeria monocytogenes	35152	10-100	Growth	Blackening	NA	Meets Expected Result		lResult
Listeria monocytogenes	13932	10-100	Growth	Blackening	NA	Meets Expected Result		lResult

(Productivity Testing)

The medium was prepared according to label directions and 10mL volumes inoculated as a mixed culture using the organisms listed below. Cultures were incubated at $30 \pm 1^{\circ}$ C under aerobic atmosphere for 22-26 hours followed by subculture onto Listeria Agar* at $37 \pm 1^{\circ}$ C and plates examined for growth at 40-48 hours.

			EXPECTED RESULTS		ACTUAL RESULTS	
Mixed Culture Testing	<u>ATCC</u>	<u>APPROX.</u> INOCULUM (CFU)	Recovery on Listeria Agar*	Reaction on Listeria Agar*	Recovery on Listeria Agar*	Reaction on Listeria Agar*
Enterococcus faecalis +	29212	> 10 ³	Inhibited		Meets Expe	ected Result
Escherichia coli+	25922	>103	Inhibited		Meets Expected Result	
Listeria monocytogenes	35152	10-100	>10 cfu	Blue colonies with opaque halo	Meets Expo	ected Result
Enterococcus faecalis + Escherichia coli +	19433 8739	$> 10^{3}$ $> 10^{3}$ 10-100	Inhibited Inhibited		Meets Expected Resu Meets Expected Resu	
Listeria monocytogenes	13932	10-100	>10 cfu	Blue colonies with opaque halo	Meets Expe	ected Result

*according to Ottaviani and Agosti

ANIM	AL DERIVED MATERIAL	COUNTRY O	F ORIGIN INFORMATIO	N
<u>ANIMAL DERIVED</u> <u>MATERIAL</u>	<u>TISSUE SOURCE/</u> <u>RISK CATEGORY*</u>	<u>ANIMAL</u> SPECIES	<u>COUNTRY OF</u> <u>ORIGIN</u>	<u>CERTIFICATE</u> OF SUITABILITY
Animal Tissue	Lung / B*	Bovine	Australia, New Zealand	N/A
Casein	Milk/ B*	Bovine	New Zealand, Australia	N/A
Enzyme	Pancreas/ NA**	Porcine	United States, Canada	N/A
Beef Extract	Skeletal Muscle/Bone/ B*	Bovine	United States, New Zealand	R1-CEP 2001-299

* Risk Categories as defined by the European Pharmacopeia.

** Not Applicable. "Non-TSE-relevant animal species."

Product was tested in compliance to the regulation noted above. Where a regulation is not referenced, standard test methods were observed. Variances in data may occur. External factors such as adverse storage conditions or contamination of product may cause loss in performance. Solus Scientific certifies that this lot met all quality control specifications for this product.

Gillian Bradley – Quality Manager

Date: Friday, April 17, 2020

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