B431	BORDET GENGOU AGAR BASE (W/1.6% AGAR)
Formula	
Ingredients :	**gms/lit.**
Potatoes infusion from	125.00
Peptic digest of animal tissue	10.00
Sodium chloride	5.50
Agar	16.00
Final pH (at 25°C) : 6.7 ± 0.2	

Directions :

Suspend 36 gms. in 1000 ml. distilled water Containing 10 ml. glycerol. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15minutes. Cool to 45 – 50°C and aseptically add 15 – 20% Sterile, fresh defibrinated blood (sheep, rabbit, human or horse) Mix throughly, taking care to avoid incorporation of air bubbles and pour into sterile petri plates.

Principle :

Infusion from Potato provides nitrogen, vitamins and amino acids, Glycerol is a carbon source. Sodium Chloride maintains the osmotic balance of the medium. Agar is a solidifying agent. The addition of blood provides essential growth requirements for Bordetella species.
Many factors will inhibit growth of B. pertussis, including fatty acids present in nasal secretions or cotton from the collection swab. Starch, present from the Potato Infusion, absorbs fatty acids.
Modified Bordet Gengou medium, enriched with 15-20% blood, yields typical B. pertussis growth. The colonies appear small, white, opaque and surrounded by a characteristic zone of hemolysis that is not sharply defined but merges diffusely into the medium The zone of hemolysis is usually absent if 30% or more blood is added to the medium and cannot be seen on charcoal – containing media. Sterile, defibrinated sheep or rabbit blood can be used in preparing the medium.

QC Tests – (I)Dehydrated Medium		
	Colour :	Cream to light yellow
	Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating) :	6.7 ± 0.2
	Colour (post autoclaving/heating) :	A)Basal medium – Cream to light yellow B)with addition of sterile defibrinated blood (15%) – cherry red
	Clarity (post autoclaving/heating) :	A :Clear to slightly opalescent B :Opaque
(III)Q.C. Test Microbiological		
	Cultural characteristics observed after 3-4 days at 35-37°C.	

	MICROORGANISM (ATCC)	GROWTH	HAEMOLYSIS	
	Bordetella bronchiseptica (4617)	Good – luxuriant	Gamma	
	Bordetella pertussis (8467)	Good – luxuriant	Beta	
	Bordetella parapertussis (10521)	Good – luxuriant	Gamma	

Precautions :	1. For Laboratory Use.
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.
Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.
	2. Some Haemophilus species will grow on Bordetella isolation media and may cross – react with B. pertussis antisera. It may be prudent to rule out X and V factor dependence.
Use :	For detection and isolation of Bordetella pertusis and Bordetella parapertusis.
Storage :	Dehydrated medium- below 30°C Prepared medium– Between 2 to 8°C.
Packing :	500 gm. bottle

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B431	36g/l	13.888L	6.7 ± 0.2	15 – 20% Sterile, fresh defibrinated blood (sheep, rabbit, human or horse	121^0C / 15 minutes

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