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# Product Name : X Factor Test, V Factor Test, X + V Factor Test

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Use for the presumptive identification of *Haemophilus* spp.

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V Factor Test Discs ..... 100 discs  
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## DESCRIPTION

X Factor Test, V Factor Test and X + V Factor Test are constituted by paper discs with special features, containing the respective coagulation factors, used for differentiating *Haemophilus* spp.

## PRINCIPLE OF THE METHOD

Different strains of *Haemophilus* grow on a culture medium only in presence of the coagulation factor or factors (X, V, or both) which they need. These different requirements allow the differentiation and the identification of *Haemophilus* spp.

## COMPOSITION

- Each disc of X FACTOR TEST contains Hemin.
- Each disc of V FACTOR TEST contains NAD (Nicotinamide-Adenine-Dinucleotide).
- Each disc of V+X FACTOR TEST contains Hemin and NAD (Nicotinamide-Adenine-Dinucleotide).

## USE

- Take the cartridges container from the refrigerator and leave it on the test bench until it reaches room temperature (about 30 minutes). This will prevent humidity being deposited on the discs when the package is opened, which could prejudice their long-term stability.
- Using a sterile swab, evenly inoculate the surface of a plate of TSA (Tryptic Soy Agar) (MB-T1052) or Mueller Hinton Agar (MB-M1033) with a pure suspension of the microorganism to test.
- Using sterile tools, press one disc of X Factor Test (MB-9503), V Factor Test (MB-9504) and X + V Factor Test (MB-9505) on the inoculated surface, at a distance of 120° from one to another and at 1.5-2 cm from the edge of the plate. Incubate at 36±1°C for 24-48 in 5-10% carbon dioxide atmosphere.

## INTERPRETATION OF THE RESULTS

If the organism requires X Factor alone, it will grow only at the edge of the X and the X + V Factor Test discs. If it requires V Factor alone, it will grow only at the edge of the V and the X + V Factor Test discs. If both X and V Factors are required, it will grow only at the vicinity of the X + V Factor Test discs.

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Some examples are indicated in the following table.

Microorganism	ATCC	Without Factors	X Factor	V Factor	X + V Factors
<i>Haemophilus influenzae</i>	10211	-	-	-	+
<i>Haemophilus parainfluenzae</i>	7901	-	-	+	+
<i>Haemophilus ducreyi</i>	27722	-	+	-	+
<i>Bordetella pertussis</i>	8467	+	+	+	+

## QUALITY CONTROL

Each batch of X Factor Test, V Factor Test and X + V Factor Test is subjected to microbial control, inoculating pure suspensions of *Haemophilus influenzae* and *Haemophilus parainfluenzae* on plates of TSA (Tryptic Soy Agar)(MB-T1052).

## PRECAUTIONS

X Factor Test, V Factor Test and X + V Factor Test cannot be classified as being hazardous according to the current legislation. X Factor Test, V Factor Test and X + V Factor Test is a disposable device to be used only for diagnostic use in vitro. It must be used in the laboratory by properly trained personnel, using approved aseptic and safety methods for handling pathogenic agents.

## STORAGE

Keep , X Factor Test, V Factor Test and X + V Factor Test 2-6°C in their original packaging protected from sunlight. Keep them away from sources of heat and avoid excessive temperature fluctuations. In these conditions, X Factor Test, V Factor Test and X + V Factor Test are valid until the expiry date shown on the label. Do not use them beyond that date. Dispose of them if they show signs of deterioration.

## DISPOSAL OF USED MATERIAL

After use, X Factor Test , V Factor Test and X + V Factor Test and material that has come into contact with the sample must be decontaminated and disposed of in accordance with the techniques used in the laboratory for decontamination and disposal of potentially infected material.

## REFERENCES

- Kilian M. (1980) *Haemophilus*. in Manual of Clinical Microbiology. Eds. Lennette et al. Amer. Soc. for Microbiol. 3rd edn. Washington.

## PACKAGING

Cat. No : MB-9503 X Factor Test	100 discs
Cat. No : MB-9504 V Factor Test	100 discs
Cat. No : MB-9505 X + V Factor Test	100 discs

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