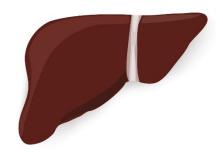


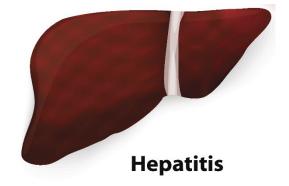
ABONTM Hepatitis Product Training

What is Hepatitis?

- **Hepatitis** is a medical condition defined by the inflammation of the liver and characterized by the presence of inflammatory cells in the tissue of the organ
- There are 6 viruses known to affect the liver and cause Hepatitis: HAV, HBV, HCV, HDV (Delta), Hepatitis E virus (HEV) and HGV.
- Hepatitis A and E are typically caused by ingestion of contaminated food or water.
- Hepatitis B, C and D are typically caused by contact with contaminated blood or body fluids.
- There are two chronic and serious forms
 - Hepatitis B
 - Hepatitis C



Normal liver



Hepatitis-Major Etiologies

- 1. Viral infections
- 2. Cytotoxic drugs
- 3. Cytomegalovirus (CMV)
- 4. Autoimmunity
- 5. Alcohol

Hepatitis Symptoms

- Hepatitis symptoms include:
 - Fatigue
 - Flu-like symptoms
 - Dark urine
 - Pale stool
 - Abdominal pain
 - Loss of appetite
 - Jaundice
 - Weight Loss

Many people feel no symptoms, and may be infected for years without knowing it.

Hepatitis B Virus

Hepatitis B-Diagnosis

Serologic markers

- HBsAg: indicate the person is infectious
- **HBsAb:** indicate recovery and immunity from Hepatitis B virus infection
- HbeAg: Virus copy
- **HBeAb:** Virus stop copy
- HBcAb: ever infected or on going
- HBcAg: Hepatitis B Virus Core Antigen, almost no free HBcAg

ABON Hepatitis B Product-HBsAg

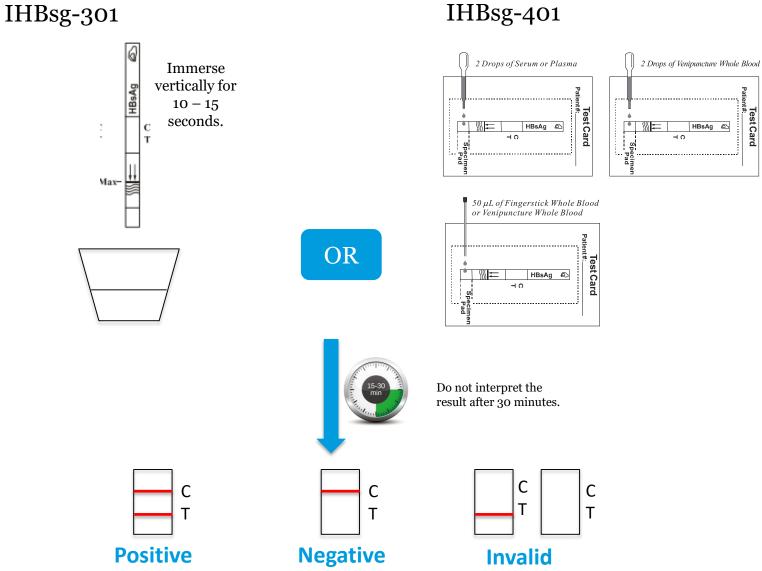
Parameter	Description							
Intended Use	Detection of HBsAg (Hepatitis B Surface antigens) in human serum or plasma or whole Blood							
Format	Immunochromatographic Lateral Flow Principle Double Antibody Sandwich							
Chromogen	Latex	Antibodies Highly purified antibodies to HBsAg						
	Line No.	Line Name Description			on			
Line Sescription	Line 1	Test Line (T)		Coat with a	Coat with anti-HBsAg Antibodies, detect HBsAg			
	Line 2	Control	trol Line (C) To serve as a proc		edural control			
Test Format	Device			Strip				
Catalog No.	IHBsg-30 (Chromoge		IHBsg	IHBsg-402		IHBsg-301	IHBsg-401	
Sensitivity	>99.0%		98.99% (97.93%-99.59%)		.59%)	>99.0%	99.0%(97.2%-99.8%)	
Specificity	96.7%		99.87% (99.67%-99.97%)		.97%)	97.0%	99.9%(99.3%-100%)	
Accuracy	98.3%					98.5%	99.64%(99.07%-99.90%)	
Pack	40 Tests		40 Tests		50 Tests	50 Tests		

Focus, CE marked

Hepatitis B Product-Other HBV

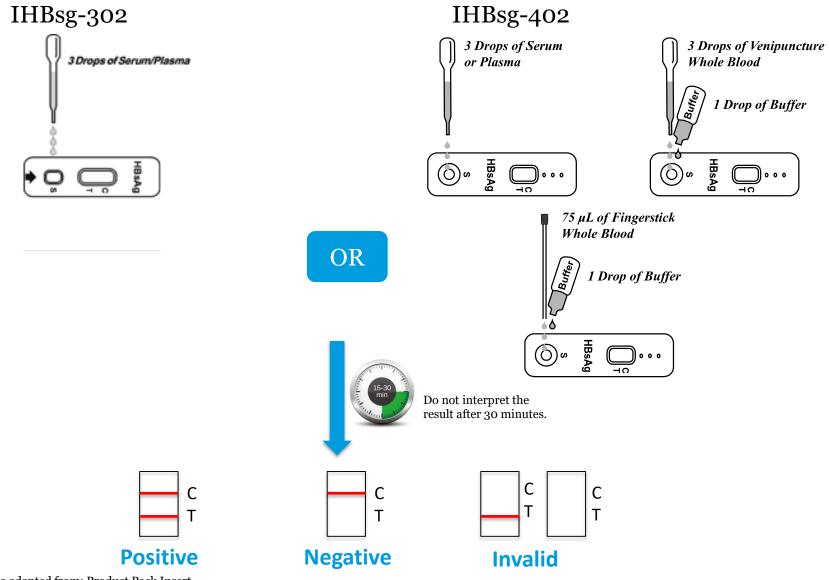
Name	Specimen	Format	Catalog No.	Sensitivity	Kit Size
One Step Hepatitis B Surface Antibody Test Device (Serum/Plasma)	Serum/Plasma	Device	IHBsb-302	100% (99.4%-100.0%)	40
One Step Hepatitis B Virus Combo Test Device (Serum/Plasma)	Serum/Plasma	Device	IHB-355	See insert	25

Hepatitis B Product Procedure



Data adapted from: Product Pack Insert

Hepatitis B Product Procedure



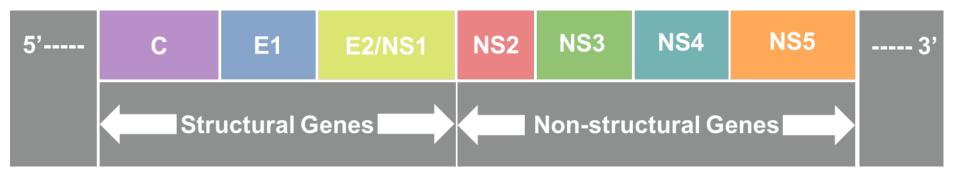
Data adapted from: Product Pack Insert

Hepatitis C Virus

Hepatitis C Virus

Virus

- An envelope, single stranded positive sense RNA including:
 - Structural genes at the 5' end
 - Non-structural genes at the 3' end

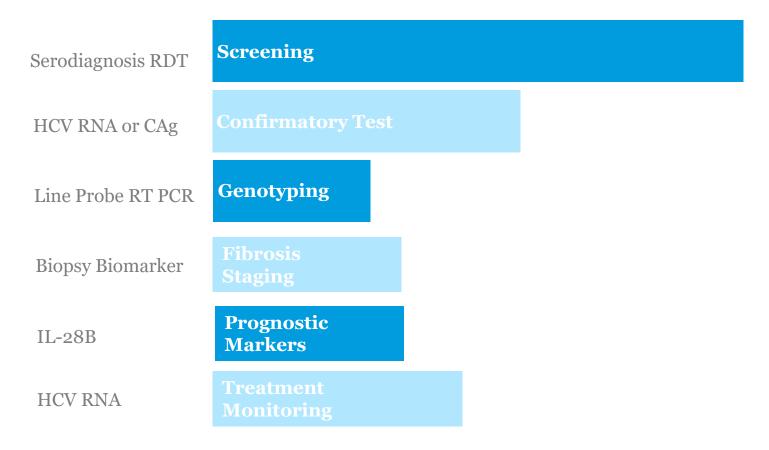


Hepatitis C

- 130-150 million people globally have chronic Hepatitis C infection ⁵
- 350,000-500,000 die each year from Hepatitis C-related liver disease ⁵
- Of those with chronic HCV infection, the risk of cirrhosis of the liver is 15-30% within 20 years 5
- There is NO vaccine against HCV
- An early diagnosis in the course of the disease can:
 - Increase the chances of successful treatment
 - Increase impact of essential lifestyle changes
 - Limit cross-infection

The HCV Diagnosis Continuum

The Hepatitis C Virus is a complex organism and treatment modalities are varied.

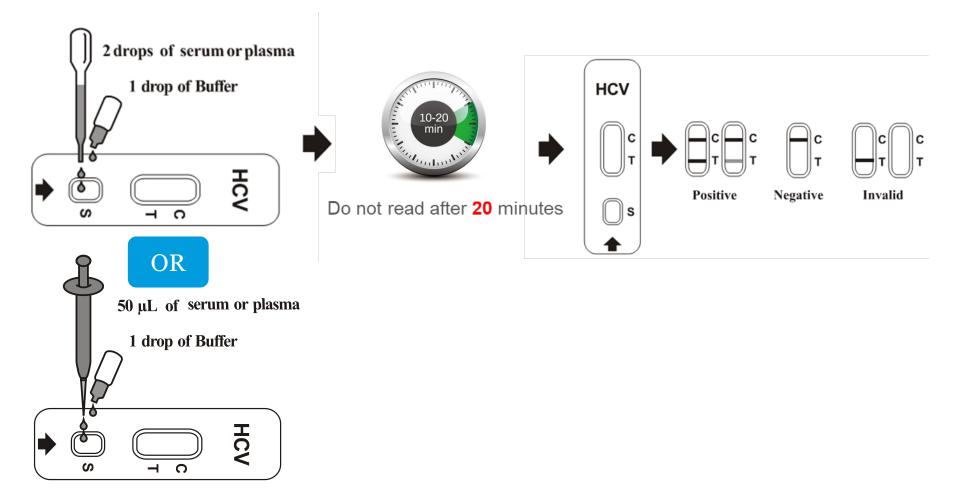


ABON™ HCV Test (Serum/Plasma) Brief Information

Parameter	Description					
Product Name	Hepatitis C Virus Rapid Test Device (Serum/Plasma)					
Intended Use	Detection of anti-HCV antibodies					
Cat. No.	IHC-302		Pack	40 Tests		
Format	Immunochromatographic Lateral Flow Assay					
Detection Principle	Double Sandwich Antigen					
Test Time	10-20 min					
Performance Characteristics	Sensitivity	>99.53% (99.53%-100%)*	Specificity	99.78% (99.36%-99.95%)*		

*95% Confidence Interval

Hepatitis C Virus Rapid Test Device (Serum/Plasma)



Hepatitis C Virus Rapid Test Device (Serum/Plasma)

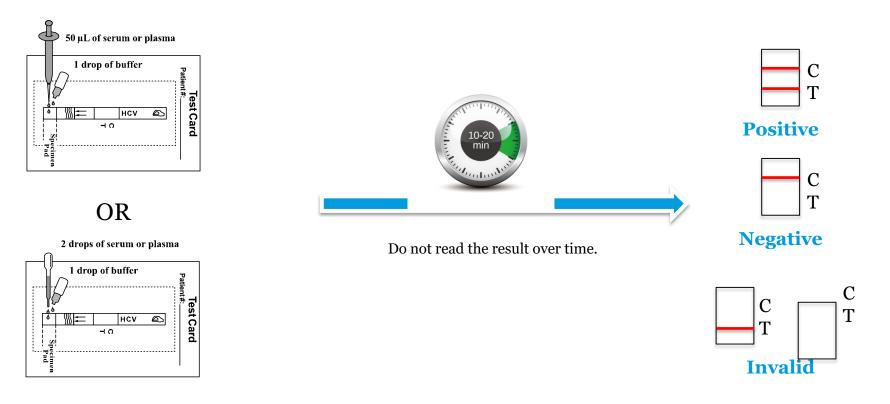
Method		Commer	Total Results		
HCV Test Device	Results	Positive	Negative	Results	
	Positive	630	3	633	
	Negative	0	1367	1367	
Total Results		630	1370	2000	

Sensitivity:>99.53%(99.53%-100.0%)* Specificity:99.78%(99.36%-99.95%)* Accuracy:99.85%(99.56%-99.97%)* * 95% Confidence Interval

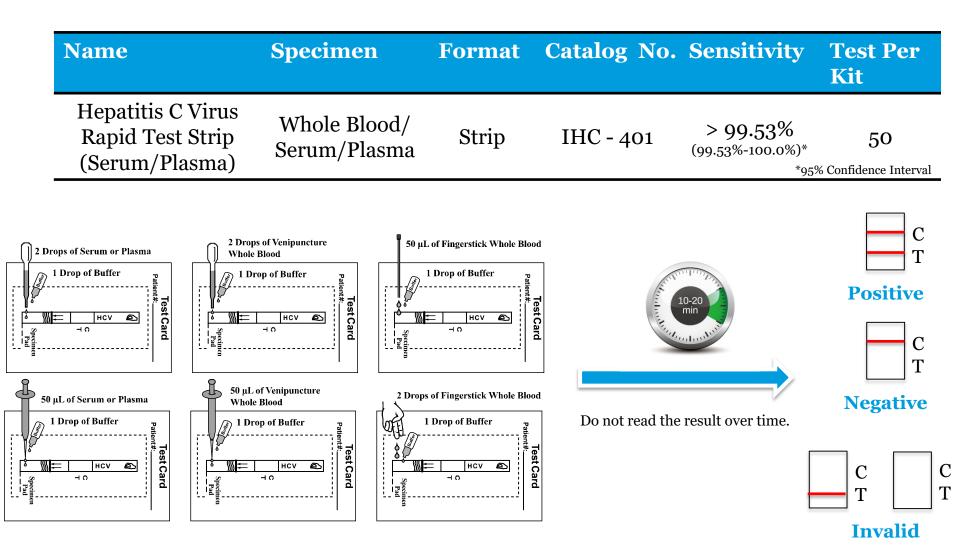
Hepatitis C Product-Other HCV

Name	Specimen	Format	Catalog No.	Sensitivity	Test Per Kit
Hepatitis C Virus Rapid Test Strip (Serum/Plasma)	Serum/Plas ma	Strip	IHC - 301	> 99.53% (99.53%-100.0%)*	50

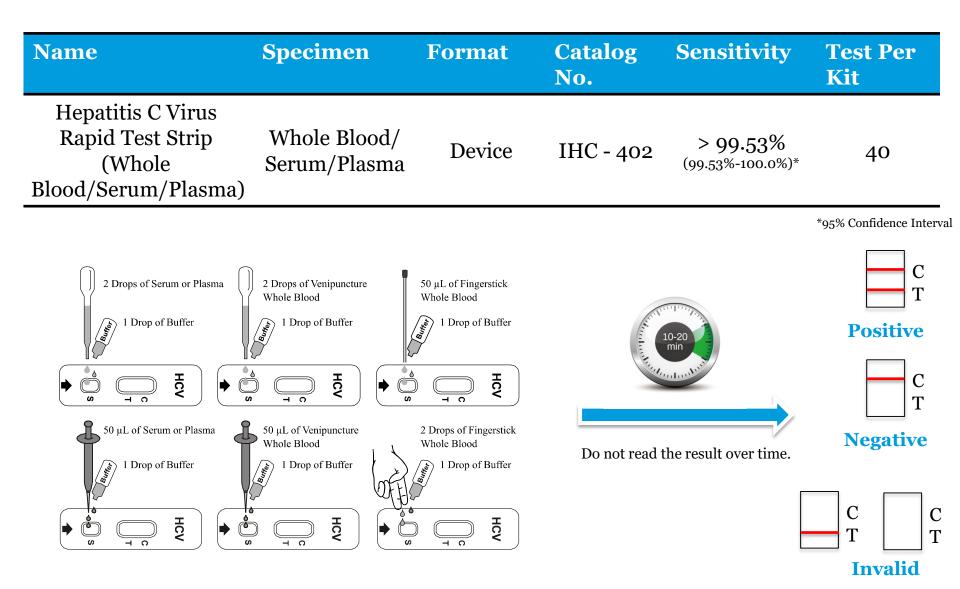
*95% Confidence Interval



Hepatitis C Product-Other HCV



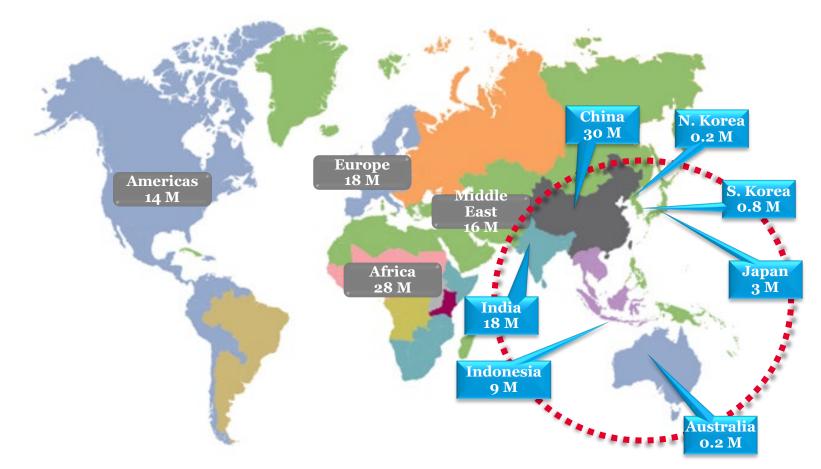
Hepatitis C Product-Other HCV



Hepatitis

Hepatitis C Incidence

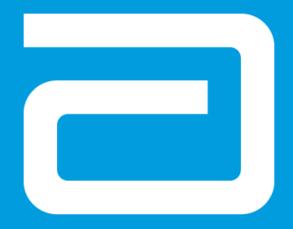
According to recent estimates, more than 185 million people globally have been infected with Hepatitis C, of whom 350,000 die each year.⁶ Estimated number of chronically infected individuals (2010)⁶



Data adapted from: 6. Lavanchy, D. (2010) Evolving epidemiology of hepatitis C virus

References

- 1. World Health Organzation (WHO) What is hepatitis [Online] https://www.who.int/features/qa/76/en/ Accessed 4 December 2018
- 2. Healthline [Online] <u>https://www.healthline.com/health/hepatitis#symptoms</u> Accessed 4 December 2018
- 3. Very Well Health [Online] <u>https://www.verywellhealth.com/hbeag-meaning-and-test-results-1759933</u>. Accessed 28 December 2018.
- 4. World Journal of Gastroenterology [Online] <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4239486/</u>. Accessed 28 December 2018
- 5. UNIT AID (2015) Hepatitis C Diagnostics Technology Landscape 1st Edition
- 6. Lavanchy, D. (2010) Evolving epidemiology of hepatitis C virus. [Online] Available at: <u>http://onlinelibrary.wiley.com/doi/10.1111/j.1469-0691.2010.03432.x/epdf</u> Accessed: 09 Jun 15.



Abbott