



Bio-Rad Laboratories
Improving lives with every test.

Herpes Simplex Virus 1/2

Herpes 1/2 DFA and Herpes 1/2 IgG EIA

Infections of Herpes Simplex Virus (HSV) most often cause blister-like sores or blemishes on the skin that eventually crust over in scabs before healing. HSV-Type 1 commonly causes oral herpes, and HSV-Type 2 typically affects the genital region. Both types, however, can cause either infection.

Herpes Simplex Virus can also cause Herpes simplex encephalitis, a rare but potentially fatal infection caused by HSV-Type 1. Ophthalmic infection with HSV causes herpes keratitis, one of the most common viral causes of blindness.

Pathfinder™ HSV 1 and 2 DFA

The Pathfinder® HSV 1 and 2 kit provides direct antigen detection and differentiation of Herpes Simplex Virus (HSV) Types 1 and 2. The monoclonal antibody-based test can be used to directly stain clinical specimens or tissue culture cells.

HSV 1 and 2 IgG EIA

The HSV 1 and 2 IgG EIA kit provides qualitative and semi-quantitative detection in serum samples.

Simple and Convenient

Pathfinder™ Herpes 1 and 2

- 1 test, 2 results
- Direct antigen detection and differentiation of HSV types 1 and 2 by DFA using fluorescein-conjugated monoclonal antibodies
- Directly stain clinical specimens or tissue culture cells
- I.D. and typing of direct clinical specimens
- Confirmation of cell culture isolates
- Room temperature incubation
- Control slide with ± controls
- Results in one hour

HSV IgG EIA

- Microplate indirect EIA, 96-test kit
- Qualitative and semi-quantitative procedures
- Detection of IgG
- Antibodies to types 1 and 2
- 90 minute total incubation
- Room temperature incubation
- Objective, normalized index values



Herpes Testing

Pathfinder™ HSV

Pathfinder™ HSV Identification in Direct Clinical Specimens Results by Investigator

	TP	FP	FN	TN	Inadequate No. (%)	Total
Pathfinder Reagents	+	+	-	-		
Cell Culture Method	+	-	+	-		
Investigator A	34	0	6	18	11 (16%)	69
Investigator B	21	1	6	18	3 (6%)	49
In-house	26	0	8	7	6 (13%)	47
Total	81	1	20	43	20	165
Sensitivity = $\frac{TP}{TP + FN} = 80\%$ Specificity = $\frac{TN}{TN + FP} = 98\%$						

HSV Identification in Direct Clinical Specimen Results by Sex and Site of Lesion

Site of Lesion	Male	Female	Predictive Value			
			Sensitivity $\frac{TP}{TP + FN}$	Specificity $\frac{TN}{TN + FP}$	Positive $\frac{TP}{TP + FP}$	Negative $\frac{TN}{TN + FN}$
Genital	69		79% 38/48	95% 20/21	97% 38/39	67% 20/30
Genital		43	81% 25/31	100% 12/12	100% 25/25	67% 12/18
Anal	8	3	71% 5/7	100% 4/4	100% 5/5	67% 4/6
Other	10	11	86% 12/14	100% 7/7	100% 12/12	78% 7/9
Unknown	1					
Total	88	57				

Note: The calculations in Table 1 and 2 are based on comparison to cell culture as the reference method.

HSV 1 and 2 IgG

Interpretation of HSV 1 and 2 IgG Results

Index VALUE	Interpretation
< 0.9	Negative for anti-HSV; presumed no previous exposure
≥ 0.9 < 1.1	Equivocal
≥ 1.1	Positive for anti-HSV; presumed exposure to HSV type 1 or type 2 virus



HSV IgG Indirect EIA Procedure

- Microplate: breakable wells dry coated with Ag
- Pipette 100 µL of diluted test samples, calibrators or samples into the wells (1:51 for IgG)
 - Incubate 30 minutes at room temperature
 - 4 washes
- Dispense 100 µL of ready-to-use conjugate
 - Incubate 30 minutes at room temperature
 - 4 washes
- Dispense 100 µL of ready-to-use chromogen/substrate
 - Incubate 30 minutes at room temperature
 - Add 100 µL of ready-to-use Stop Reagent

Read: At 405 nm. Interpret results according to package insert instructions.

Ordering Information

Catalog No.	Description
25179	HSV (1 and 2) IgG EIA, Microplate96 tests
30492	Pathfinder® HSV 1 and 2 DFA Kit (Complete kit with controls)50 detections
30493	Pathfinder® HSV Control Slide4 wells



Bio-Rad Laboratories

For further information, please contact the Bio-Rad office nearest you or visit our website at www.bio-rad.com.

Clinical Diagnostics Group

Website www.bio-rad.com U.S. 1-800-2-BIO-RAD Australia 61-2-9914-2800 Austria 43-1-877-8901 Belgium 32-9-385-5511 Brazil 5521-2507-6191 Canada 1-514-334-4372 Czech Republic 420-2-41430532 China 86-21-63052255 Denmark 45-4452-1000 Finland 358-9-804-22-00 France 33-1-4795-6000 Germany 49-89-31884-0 Hong Kong 852-2789-3300 India 91-124-6398112 Israel 972-3-9514127 Italy 39-02-216091 Japan 81-3-5811-6290 Korea 82-2-3473-4460 Latin America 305-894-5950 Mexico 5255-5534-2552 The Netherlands 31-318-540666 New Zealand 64-9-415-2280 Norway 47-23-38-41-30 Poland 48-22-331-99-99 Portugal 351-21-472-7700 Russia 7-095-721-14-00 Singapore 65-6415-3188 South Africa 27-11-442-85-08 Spain 34-91-590-5200 Sweden 46-8-555-127-00 Switzerland 41-61-717-95-55 Thailand 662-651-8311 United Kingdom 44-208-328-2000