

# HIV Positive? - It depends where you live

Take a look at the criteria that determine a positive HIV test result

**T**he HIV antibody tests do not detect a virus. They test for any antibodies that react with an assortment of 'virus-proteins' that experts assure us are unique to HIV.




According to AIDS-experts, the ELISA test is not very specific and may react in the absence of HIV infection, and thus if positive is repeated, and if still positive warrants a third, but different, test called the Western blot. In the Western blot the 'virus-proteins', about ten of them, are located at discrete spots in a paper strip. Serum is added and whenever there is a reaction with some antibodies a colour change occurs which shows up as a dark band. The test is read by noting which bands show up, in other words, which proteins are reacting. Certain combinations of bands are defined as a positive test.

It is most peculiar that the location and number of bands

required for a positive Western blot VARY around the world, and may even vary between laboratories within the same city. In Australia at least four bands are required, in Canada and much of the USA three or more. And in Africa two will do. If each indicates HIV infection then HIV must cause different populations of antibodies to appear in different places. Does that not sound very odd? Can HIV navigate? But at least it gives some Africans a way out: all an African has to do is retest in Australia because two bands would not be considered positive there.

Nevertheless, in spite of lack of standardisation and other problems such as reproducibility, the Western blot is promoted as greater than 99.9% specific, and if positive is regarded as synonymous with HIV infection.

A Martian might be forgiven for wondering whether wine-tasting was less subjective. ■

Western Blot "virus proteins"		Africa	Australia	U.S. Food & Drug Admin	U.S. Red Cross	CDC (1)	CDC (2)	CON <sup>1</sup>	MACS <sup>2</sup>	UK
ENV gene	 p160 p120 p41	ANY 2	1 OR >	1 OR >	1 OR >	p120/ p160 AND p41	p120/ p160 OR p41	p120/ p160 OR p41	ANY 1 Strong OR 3 Weak bands from: p15, p24, p32, p41, p45, p53, p55, p64, & p120.	1 OR >
POL gene	 p68 p53 p32	O P T I O N A L	ANY 3	p32	ANY 1			p32	Score '1' for each weak band, and '3' for each strong band - total of '3' or greater is positive	p31 (sic)
GAG gene	 p55 p40 p24 p18			p24	ANY 1	p24	p24	p24		p24

HIV + Western Blot Test Criteria in various centres around the world  
With thanks to Dr Val Turner

<sup>1</sup> CON = the Centers for Disease Control and Prevention  
<sup>2</sup> MACS = MACS AIDS Screening Study (USA)