

InstaQuant human IgG test strip

The XpressQuant human IgG Test Strip is a novel combo lateral flow assay designed for the rapid detection and semi-quantitative measurement of both human IgG and human IgG Fc-fusion proteins. The assay features a simple workflow and can be completed within 5 minutes without the need for any instruments. The test strip can be applied directly to unpurified samples in cell lysis buffer or cell culture medium, with or without FBS. It is also compatible with samples prepared in common buffers such as PBS, Tris, and HEPES.

The detection limit of the XpressQuant human IgG test strip is 0.1 µg/mL for human IgG1, IgG2, and IgG4. The product does not detect human IgG3. The quantitative range for human IgG1, IgG2, and IgG4 extends from the detection limit up to 10 mg/mL. Unlike traditional sandwich lateral flow assays, this test is not affected by the Hook effect and does not produce false-negative results at high analyte concentrations. By comparing the observed line pattern with the reference images provided in the protocol (see back), sample concentrations can be easily determined semi-quantitatively by visual inspection.

XpressQuant is a patent-pending technology and represents a first-of-its-kind lateral flow platform that enables quantitative measurement of analyte concentrations with unprecedented ease and speed.

Contents and Storage

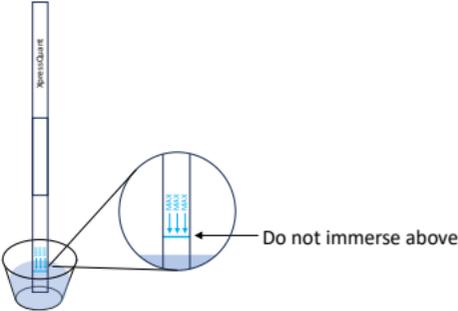
CATALOG NUMBER	UNIT	STORAGE
XQ-hIgG-25	25	Room temperature Keep dry
XQ-hIgG-100	100	Room temperature Keep dry

Precautions

1. The test strip contains a total of three lines: a control line (C), test line T1, and test line T2. The control line (C) is the uppermost line, located approximately 42 mm from the bottom of the strip. Test line T1 is the middle line, positioned about 38 mm from the strip bottom, and test line T2 is the bottom line, located approximately 34 mm from the strip bottom.
2. The line patterns shown in the protocol are read at 5 minutes. Reading the results at longer time points may increase assay sensitivity. The line pattern remains stable for at least 3 hours, although the line color may gradually fade over time.
3. Results shown here is for human IgG1, IgG2 and IgG4. This product does not detect human Ig3.
4. The product can also be used to detect human IgG Fc-fusion proteins. The concentrations of human IgG Fc-fusion proteins should be calculated based on the molecular weight of the protein.
5. For more accurate measurements, standard samples with known concentrations of the same protein prepared in the same matrix can be used to first generate reference line patterns, which can then be compared with the line pattern of the test sample.

Refer to the back for detailed test procedure instructions

Test Procedure

Step	Description	Illustration																
1	Add 100 μ L sample to a well (e.g. a well of a 96-well plate) or a vial. (Dilute the sample with a buffer (e.g. PBS) if desired.)																	
2	Put the test strip into the vial, with the arrow label side immersed in the sample.																	
3	Wait 5 minutes until the control line is clear																	
4	Read the result by comparing to the images below																	
																		
	<table border="1"> <thead> <tr> <th>Concentration</th> <th>0</th> <th>0.1 μg/mL</th> <th>1 μg/mL</th> <th>10 μg/mL</th> <th>100 μg/mL</th> <th>1 mg/mL</th> <th>\geq10 mg/mL</th> </tr> </thead> <tbody> <tr> <th>Line pattern</th> <td>Two clear lines C and T1. $T1 > C$</td> <td>Two clear lines C, T1 and a faint line T2. $T1 > C >> T2$</td> <td>Three clear lines C, T1 and T2. $T1 > C > T2$</td> <td>Three clear lines C, T1 and T2. $T2 \approx T1 \approx C$</td> <td>Three clear lines C, T1 and T2. $T2 \approx C > T1$</td> <td>Two clear lines C, T2 and a faint line T1. $C > T2 >> T1$</td> <td>One clear line C and a faint line T2 $C >> T2$</td> </tr> </tbody> </table>	Concentration	0	0.1 μ g/mL	1 μ g/mL	10 μ g/mL	100 μ g/mL	1 mg/mL	\geq 10 mg/mL	Line pattern	Two clear lines C and T1. $T1 > C$	Two clear lines C, T1 and a faint line T2. $T1 > C >> T2$	Three clear lines C, T1 and T2. $T1 > C > T2$	Three clear lines C, T1 and T2. $T2 \approx T1 \approx C$	Three clear lines C, T1 and T2. $T2 \approx C > T1$	Two clear lines C, T2 and a faint line T1. $C > T2 >> T1$	One clear line C and a faint line T2 $C >> T2$	
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