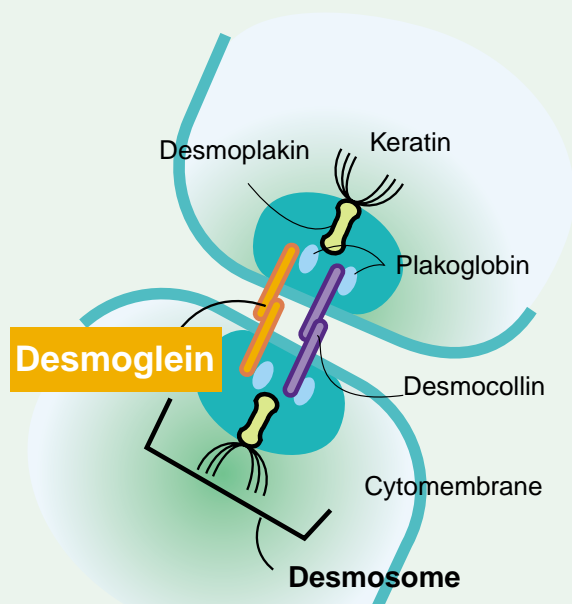


MESACUP Dsg-1 & Dsg-3 ELISAs

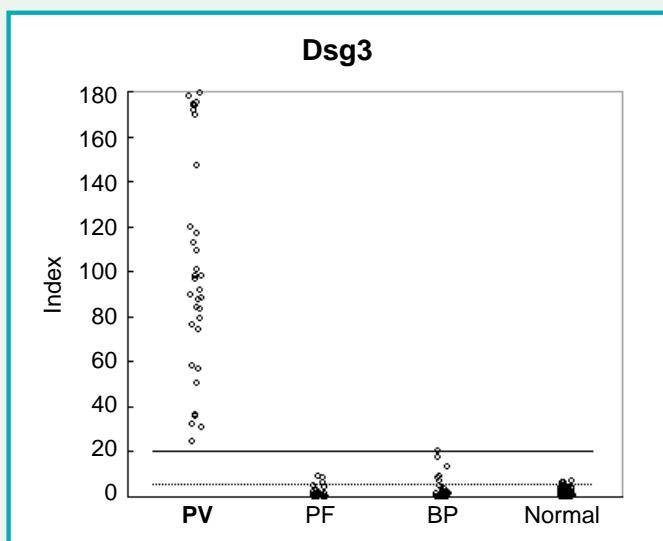
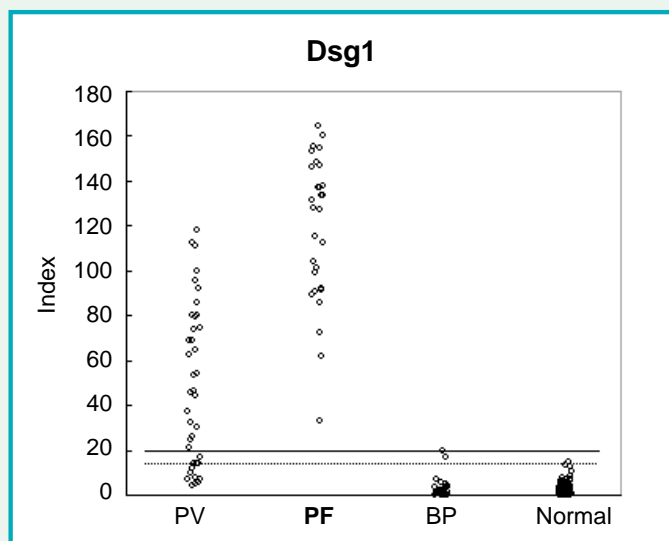
For the diagnosis of pemphigus and the distinction between pemphigus vulgaris and pemphigus foliaceus !



Cell-cell adhesion of Epidermal cells

- ★ MESACUP Dsg-1 & Dsg-3 ELISAs are semi-quantitative enzyme-linked immunosorbent assay for the detection of autoantibodies to desmoglein 1(Dsg1) and desmoglein 3(Dsg3).
- ★ Recombinant human Dsg1 and Dsg3 are used for the solid phase.
- ★ 48 wells coated with Dsg1 and 48 wells coated with Dsg3.
- ★ CE marked.
- ★ High specificity

Positivity and Specificity of Dsg-1 and Dsg-3 ELISA testing



PV: Pemphigus vulgaris, PF: Pemphigus foliaceus, BP: Bullous pemphigoid

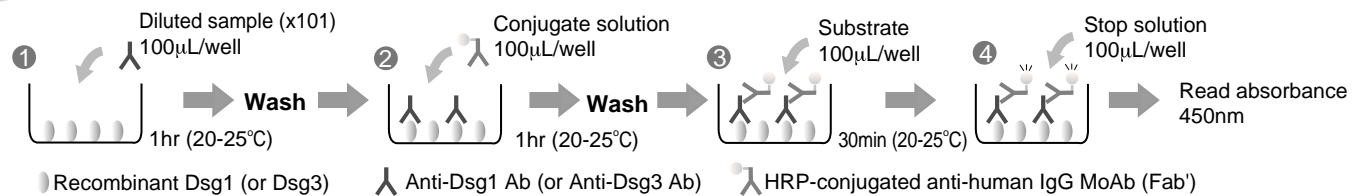
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Pemphigus includes a group of often fatal, autoimmune, blistering diseases characterized by intraepithelial lesions. Pemphigus vulgaris and its variants may present with oral or other mucosal lesions alone or with mucosal plus skin lesions. Pemphigus foliaceus and its variants present with skin lesions alone. Indirect immunofluorescent (IIF) studies reveal that both forms of pemphigus are caused by autoantibodies to cell surface antigens of stratified epithelia of mucous membranes and skin. These antibodies bind to calcium dependent adhesion molecules in cell surface desmosomes, notably desmoglein 1(Dsg1) in pemphigus foliaceus and desmoglein 3 (Dsg3) in pemphigus vulgaris. Pemphigus vulgaris patients with both mucosal and skin lesions have antibodies to both Dsg3 and Dsg1.

The diagnosis of pemphigus depends on biopsy and serum studies that characterize lesions and detect the autoantibodies that cause them. Serum studies afford highly sensitive diagnostic aids. Originally they were performed by indirect immunofluorescence (IIF) using monkey esophagus and other tissues sections. The identification of the reactive antigens as Dsg1 and Dsg3 has made it possible to develop highly specific and sensitive ELISA methods.

Brief Assay Procedure

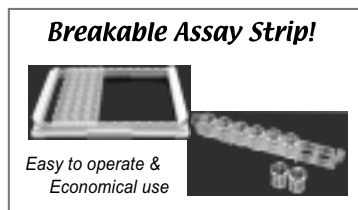


Clinical study

Population (number)	Dsg1 Positive	Dsg3 Positive
Normal blood donors (n = 180)	0 (0%)	0 (0%)
Bullous pemphigoid (n = 45)	0 (0%)	1 (2.2%)
Pemphigus vulgaris (n = 39)	27 (69.2%)	39 (100%)
Pemphigus foliaceus (n = 31)	31 (100%)	0 (0%)

Kit components

Microwell Strips coated with antigens
 Calibrator 1(0 U/mL)*
 Calibrator 2(100 U/mL)*
 Conjugate Reagent (HRP-conjugated anti-human IgG)
 Conjugate Diluent**
 Assay Diluent*
 Wash Concentrate (10x)
 Substrate*
 Stop Solution*



* Ready for use
 ** Provided in MESACUP Desmoglein TEST

Product	Product #	Volume
MESACUP Dsg1	RG-7680E-D	48 wells
MESACUP Dsg3	RG-7685E-D	48 wells

037163-5101

Produced by

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