Bullous Pemphigoid Antigens (180 kDa and 230 kDa), IgG

ARUP test code 0092566

### IMMUNODERMATOLOGY REPORT

**Specimen(s):**
1. Serum specimen

**Clinical/diagnostic Information:**
No clinical information provided.

### DIAGNOSTIC INTERPRETATION

Consistent with pemphigoid

(See Results and Comments including additional test recommendations)

### RESULTS

**Enzyme Linked Immunosorbent Assay (ELISA)**

**Bullous Pemphigoid (BP) 180 and 230 IgG Antibodies**

**IgG BP 180 antibodies:** 45 units (H)

Reference Range:
- Positive (H) = Greater than or equal to 9 units
- Negative = Less than 9 units

**IgG BP 230 antibodies:** 43 units (H)

Reference Range:
- Positive (H) = Greater than or equal to 9 units
- Negative = Less than 9 units

(H = high/increased; units = units/mL serum)

### COMMENTS

**Specific**

These ELISA results, demonstrating increased IgG BP 180 and IgG BP 230 antibody levels, support the diagnosis of pemphigoid. However, up to 7 percent of individuals unaffected by pemphigoid, including some with other immunobullous diseases, have increased IgG BP 180 and/or IgG BP 230 antibody levels. An additional consideration is that co-expression of IgG and IgA basement membrane zone antibodies may develop in patients with pemphigoid, which may have implications for disease severity and treatment approach.
Clinical correlation is needed, including correlation with direct immunofluorescence on a biopsy specimen and/or treatment status. To further evaluate the immunopathological profile, testing for serum IgG and IgA basement membrane zone antibodies by indirect immunofluorescence (ARUP test numbers 0092056 and 0092057) may be performed on this specimen by add-on test request through ARUP Client Services at 1-800-242-2787 option 2.

Monitoring serum antibody profiles by indirect immunofluorescence as well as antibody levels by ELISAs may be useful in assessing disease expression and activity, including response to therapy.

General

Major molecular structures in the basement membrane zone to which IgG pemphigoid antibodies bind have been identified and termed "BP 180" for a 180 kDa bullous pemphigoid antigen and "BP 230" for a 230 kDa bullous pemphigoid antigen. BP 180 is a transmembrane component of the basement membrane zone with collagen-like domains. BP 230 is located in the hemidesmosomal plaque of basal cells in the epidermis. IgG BP 180 and IgG BP 230 antibody levels are in the negative range in normal individuals, and IgG BP 180 antibody levels may correlate with disease activity in pemphigoid, diminishing in response to therapy. Patients with pemphigoid may show reactivity to basement membrane zone components in addition to or other than the BP 180 and BP 230 epitopes expressed in these ELISAs.

TESTING METHODS

Enzyme Linked Immunosorbent Assay (ELISA)

IgG BP 180 and IgG BP 230 serum antibody levels determined by U.S. Food and Drug Administration-approved ELISAs (Mesacup, MBL BION).

Kristin M Leiferman, MD
Immunodermatologist
Electronically signed 5/29/2019 6:54:00AM
Performed at: ARUP - University Hospital Laboratory 50 N. Medical Drive Salt Lake City UT 84132

EER Bullous Pemphigoid Antigens, IgG

See Note

Access ARUP Enhanced Report using either link below:
- Direct access:
- Enter Username, Password:
  Username:
  Password:
  Performed at: ARUP - University Hospital Laboratory 50 N. Medical Drive Salt Lake City UT 84132

H=High, L=Low, *=Abnormal, C=Critical
### VERIFIED/REPORTED DATES

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