

## Recombinant Human Ku (p70/p80)

### Antigen Specification

**Product Number: 17300**

**Description:**

Human Ku protein, composed of p70 and p80 subunits (p80 is also called p86); the subunits can associate to form a heterodimer. Recombinant antigen for solid (ELISA) and fluid phase diagnostic assays.

**Immunological function:**

Binds IgG-type human auto-antibodies.

**Origin:**

Recombinant. Expressed by recombinant baculovirus (*Autographa californica* multiple nuclear polyhedrosis virus; AcMNPV) infection of *Spodoptera frugiperda* Sf9 insect cells.

**Expression construct:**

cDNAs coding for full-length chains for the Ku p70 and p80 subunits fused to a hexa-histidine purification tag.

**Biochemical tests:**

SDS-PAGE; Western-Blot with i: anti-Ku autoantibody-positive patient sera; ii: monoclonal anti-hexa-His-tag antibody.

**Calculated molecular weight:**

p70 subunit: 70,638 Dalton

p80 subunit: 83,528 Dalton

**Calculated isoelectric point:**

p70 subunit: pH 6.3

p80 subunit: pH 5.7

p70/p80 heterodimer: around pH 6.0

**Immunological tests/Functionality:**

Standard ELISA test (checker-board analysis of positive/negative sera panels); Immuno-Dot test with positive/negative sera panels

**Recommended buffer/storage and handling conditions:**

Recommendations for storage buffer: ion strength ~200 mM, neutral to slightly alkaline pH and 20 % glycerol as cryoprotective agent. Storage temperature: -70° to -80° C. Repeated freeze/thaw cycles should be avoided.

**Coating concentration:**

0.2-0.6 µg/ml (depending on the type of ELISA plate and coating buffer). Suitable for biotinylation and iodination.

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