

## ***dsDNA (plasmid)***

### **Antigen Specification**

**Product Number: 12300**

**Description:**

Doublestranded DNA (dsDNA).  
Antigen for solid (ELISA) and fluid  
phase diagnostic assays.

**Immunological function:**

Binds IgG-type human auto-antibodies.

**Origin:**

Bacterial plasmid molecule (Size 3.400  
base pairs). Propagated in and purified  
from *E.coli*.

**Biochemical tests:**

Photometric determination of  
concentration and purity (OD ratio at  
260 nm and 280 nm); Agarose gel  
electrophoresis for determination of  
size, content of closed-circular form (>  
95 %) and absence of contaminating  
RNA and genomic DNA impurities.

**Calculated molecular weight:**

2.24 Mega-Dalton

**Immunological tests/Functionality:**

Standard ELISA test (checker-board  
analysis of positive (SLE patient) and  
negative sera panels, including the  
"First International Standard  
Preparation for dsDNA autoantibodies"  
(WHO code: Wo/80)

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

Recommendations for storage buffer:  
neutral to slightly alkaline pH and  
presence of 1 mM EDTA. Storage  
temperature:

–20° C is possible for mid-term  
storage; however, –70° to –80° C is  
recommended. Repeated freeze/thaw  
cycles should be avoided.

**Coating concentration:**

1.0-2.0 µg/ml (depending on the type  
of ELISA plate, co-coating reagents  
and coating buffer, see also remark  
below).

Suitable for biotinylation with DNA-  
biotinylation reagents.

**CAUTION:** This dsDNA antigen is  
highly purified and will behave  
differently from other DNA antigens  
(eg. genomic DNA) which due to  
residual (and antigenic!) protein  
contaminants often is more readily  
immobilised onto plastic surfaces.  
Coating of this dsDNA antigen to  
plastic surfaces is satisfactory when  
appropriate counter-ions (polycations,  
etc.) are provided in the coating buffer.  
If required for assay development,  
DIARECT can be contacted for  
information on suitable counter-ions.

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