

# dsDNA (plasmid)

# **Antigen Specification**

Product Number: 12300

## **Description:**

Double-stranded DNA (dsDNA). Antigen for in vitro research and manufacturing use only.

# 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 (checkerboard analysis of positive/negative samples, including the "First International Standard Preparation for dsDNA autoantibodies" (WHO code: Wo/80). Immunodot analyses with positive/negative samples.

# Recommended buffer/storage and handling conditions:

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

Storage conditions: - 20°C is possible for mid-term storage; however, -70°C or below 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-biotinylating reagents.

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

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