# IBL Data Sheet

Code No. 18731

**Anti-**
**Single Stranded DNA (ssDNA) Rabbit IgG Affinity Purify**

Volume : 50 µg

Introduction : Apoptosis, or programmed cell death, is a highly conserved biochemical mechanism that allows cells to die in a controlled and organized manner. This death process is essential for normal cellular differentiation and tissue homeostasis within multi-cellular organisms. The antibody can react with single stranded DNA, which produced on the process of nuclear fragmentation in apoptosis. In compare to TUNEL method, the immunohistochemical method using the antibody can be easily detects positive cells on apoptosis.

**Antigen** : Bovine single stranded DNA fragments

**Purification** : Purified with antigen

**Form** : Lyophilized product from 1 % BSA in PBS containing 0.05 %$NaN_3$

**How to use** : 1.0 mL deionized water will be added to the product, then its concentration comes to 50 µg/mL

**Stability** : Lyophilized product, 5 years at 2 - 8 °C
: Solution, 2 years at –20 °C

**Application** : This antibody can be used in immunohistochemistry with formalin fixed paraffin embedded tissues by several techniques such as Avidin Biotin Complex (ABC) Method. The optimal dilution is 1 - 2.5 µg/mL, however, the dilution rate should be optimized by each laboratory.

**Specificity** : Can react with random sequenced single DNA of all species not only of human.

**References** :


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3. Watanabe I, Toyoda M, Okuda J, Tenjo T, Tanaka K, Yamamoto T, Kawasaki H, Sugiyama T, Kawarada Y, Tanigawa N. Detection of apoptotic cells in human colorectal cancer by two different in situ methods: antibody against single-stranded DNA and terminal deoxynucleotidyl transferase-mediated dUTP-biotin nick end-labeling (TUNEL) methods.Jpn J Cancer Res. 1999 Feb;90(2):188-93.
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5. Maeda M, Sugiyama T, Akai F, Jikihara I, Hayashi Y, Takagi H. Single stranded DNA as an immunocytochemical marker for apoptotic change of ischemia in the gerbil hippocampus. Neurosci Lett. 1998 Jan 9;240(2):69-72.