Product Name

Monoclonal Human Anti-apoptotic cleavage product of human U1-70K, clone 20C4

CAT No.

MQR 2.201-100

LOT No.

13049

Quantity

100 µg

Edition: July 23, 2013

Intended use

This product is for research use only. <u>NOT for use in diagnostic or therapeutic procedures</u>.

This product is tested for use in enzyme-linked immunosorbent assay (ELISA), immunoblotting (IB), immunoprecipitation (IP).

Reagent provided

The antibody has been lyophilized in a 10 mM ammonium bicarbonate buffer.

Isotype

Human IgG1, λ

Specificity

Specificity has been tested in immunoblotting (figure 1). Additional tests for cross reactivity have not yet been performed.

Purity

Protein A purified.

Precautions

- 1. For professional users.
- As with any product derived from biological sources, proper handling procedures should be used.
- The product may be used in different techniques and in combination with different sample types and materials, therefore each individual laboratory should validate the applied test system.

Preparation of the antibody

- Recommended antibody concentration: 0.5 mg/ml
- Recommended solvent; 100 mM PBS or Tris-HCl, pH 7.0
- For a 0.5 mg/ml antibody concentration, dissolve in 200 µl buffer.

 $\underline{\text{NOTE}}$: Be careful opening the vial since the antibody resides in a vacuum.

Storage instructions

Dissolve the antibody and store at 2-8°C. For prolonged storage add sodium azide to 0.05%

Dilution guidelines

Optimum working dilutions of the product are not yet determined.

Unless the stability in the actual test system has been established, it is recommended to dilute the product immediately before use.



Relevance

The U1-70K protein is specifically bound to stemloop I of the U1 small nuclear RNA contained in the U1 small nuclear ribonucleoprotein complex (U1 snRNP), which is involved in the splicing of pre-mRNA. All components of the U1 snRNP complex, including the U1-70K protein, are important autoantigens in patients with systemic lupus erythematosus (SLE) and mixed connective tissue disease (MCTD) [1].

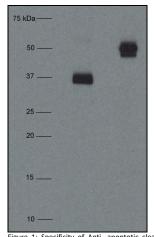


Figure 1: Specificity of Anti- apoptotic cleavage product of human U1-70K, clone 20C4, determined by Immunoblot analysis. Blot contains h apoptotic (left lane) and non apoptotic (right lane) Jurkat nuclear cell extract. Incubated with antibody fraction (0.5 mg/ml) 100X diluted in PBS containing 0,05% tween-20 and 5% non fat dry milk.

References

 Hof, D., Cheung, K., de Rooij, D.R.A.M., van den Hoogen, F.H., Pruijn, G.J.M., van Venrooij, W.J., and J.M.H. Raats. (2005). Autoantibodies specific for apoptotic U1-70K are superior serological markers for mixed connective tissue disease. Arthritis Res. Ther. 7, R302-R309.