



Monoclonal antibody against human uPA

Product No. ADG3471

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Description

The monoclonal antibody ADG3471 (clone HD-UK2, subclass IgG₁) is a murine monoclonal antibody recognizing human urokinase type plasminogen activator (uPA). The antibody has been purified from cell culture supernatant using Protein G affinity chromatography.

Properties

ADG3471 is directed against an epitope within the growth factor domain of human urokinase, amino acid sequence number 17-34. No. 3471 reacts with intact ATF, uPA A-chains, HMW-uPA and pro-uPA.

Presentation

Screw capped vial containing 250 µg of purified antibody in PBS pH 7.4, 0.1 % ProClin300. The IgG concentration is 1 mg/ml. Spin the vial briefly before opening.

Storage and Stability

Store the antibody at 2°-8°C. For long-term storage the antibody should be aliquoted and stored at -20°C or colder. It is recommended to avoid freeze-thaw cycles.

Applications

A. Flow Cytometry

The antibody has been used in flow cytometric analysis of the uPA receptor (uPAR). The antibody completely inhibits the binding of FITC conjugated pro-uPA to uPAR. It can be considered as a soluble uPAR analogue. ⁽¹⁾

B. Western blot

The antibody identifies pro-uPA after electrophoresis under both reducing and nonreducing conditions. HMW-uPA will be recognized under non-reducing conditions. A-chain fragments and ATF's are identified under both reducing and non-reducing conditions. ^(2, 3)

C. Inhibition

The antibody prevents the rebinding of dissociated uPA to surface uPAR. 0.5 mL of a 250 ng/mL solution inhibits uPA rebinding to 10⁶ acid-washed U937 cells. ⁽⁴⁾

References

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2. Effective activation of the proenzyme form of the urokinase-type plasminogen activator (pro-uPA) by the cysteine protease cathepsin L. Goretzki L, et al. FEBS Letters 1992; 297: 112-118.
3. Cathepsin B efficiently activates the soluble and the tumor cell receptor-bound form of the proenzyme urokinase-type plasminogen activator (Pro-uPA). Kobayashi H et al., J Biol Chem. 1991 Mar 15;266(8):5147-5152.
4. Flow cytofluorometric analysis of the urokinase receptor (uPAR) on tumor cells by fluorescent uPA ligand or monoclonal antibody #3936. Chucholowski N, et al. Fibrinolysis 1992; 6, Suppl. 4: 95-102.

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