

Monoclonal antibody against human 12-Lipoxygenase (12-LOX/ALOX12)

Product No. 7225

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Description

The monoclonal antibody 7225 (clone no. 25.20) is directed against human 12-Lipoxygenase (Platelet-type 12-Lipoxygenase/arachidonate 12-lipoxygenase, 12-LOX/ALOX12). Mice were immunized with purified recombinant full-length human 12-LOX, expressed in the baculovirus expression system. The antibody has been purified from cell culture supernatant using Protein A affinity chromatography. The antibody reacts with both native and recombinant 12-Lipoxygenase.

Presentation

Screw capped clear glass vial containing 250 µg of purified antibody, lyophilized from a buffer of 0.15M PBS, pH 7.4 with 100 mM mannitol added as an excipient.

Reconstitution

Add 250 µL of filtered deionized water to generate a 1 mg/mL stock solution.

Storage and Stability

Store lyophilized antibody at 2°-8°C. Reconstituted antibody should be aliquoted and stored at -20°C or colder. It is recommended to avoid freeze-thaw cycles.

Specificity

The antibody is specific for 12-LOX/ALOX12. No cross-reactivity was observed against other members of the Lipoxygenase family (5-LOX, 15-LOX-1, 15-LOX-2, 12R-LOX, and eLOX) when tested in ELISA and native PAGE.

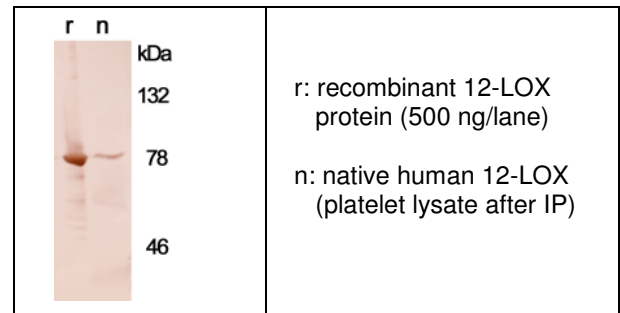
Applications

ELISA

The antibody can be used as capture antibody in ELISAs. An antibody concentration of 1-10 µg/ml is recommended.

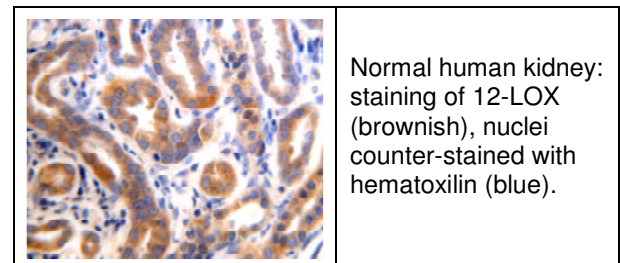
B. Western Blot

The antibody recognize native and recombinant human P-12-LOX following SDS-PAGE under reducing conditions. A primary antibody concentration of 1-10 µg/mL is recommended.



C. Immunohistochemistry

The antibody can be used for immunohistochemistry on formalin-fixed, paraffin-embedded tissue sections. A primary antibody concentration of 1-10 µg/ml is recommended. Optimal staining results were obtained using heat-induced antigen retrieval (30 min, 60°C) using a Streptavidin Peroxidase-visualisation system.



References

1. Human platelet 12-lipoxygenase, new findings about its activity, membrane binding and low-resolution structure. Aleem AM, Jankun J, Dignam JD, Walther M, Kühn H, Svergun DI, Skrzypczak-Jankun E. *J Mol Biol.* 2008 Feb 8;376(1):193-209
2. The naturally occurring Q261R variant of the human platelet 12-lipoxygenase exhibits a reduced catalytic activity but unaltered reaction specificity, substrate binding behavior and membrane association. Aleem AM, Wells L, Jankun J, Walther M, Kühn H, Reinartz J, Skrzypczak-Jankun E. *In Preparation*