Anti-Quinolones Antibody [PSH0-35] - BSA and Azide free

HA721339

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Species independent
Applications:	ELISA
Clone number:	PSH0-35

Description: Quinolones are a class of broad-spectrum antibiotics with excellent oral bioavailability and can be used to treat a wide variety of bacterial infections. They act on bacterial type II topoisomerases, DNA gyrase, and topoisomerase IV, inhibiting their function and converting them into toxic enzymes that produce permanent double-stranded breaks in the bacterial chromosome. FDA-approved indications for certain quinolones in adults include treatment of urinary tract infections, pyelonephritis, sexually transmitted infections, prostatitis, gastrointestinal and intraabdominal infections, skin and soft tissue infections, community-acquired and nosocomial pneumonia, and bone and joint infections. Further studies are currently underway to extend the use of quinolones into other therapeutic fields, such as cancer treatment and as an anti-protozoan agent. The use of quinolones may result in higher rates of clostridium difficile infection compared to other antibiotics. In multiple animal studies, quinolones have demonstrated to accumulate in the immature articular cartilage of juvenile animals, leading to the development of arthropathies and damage to the cartilage of weight-bearing joints. There are concerns regarding the potential of permanent damage to growing cartilage in human children, but there are only limited safety studies on quinolone use in pediatric patients. In pregnant women, there are theoretical concerns that the quinolones could potentially inhibit DNA synthesis in the growing fetus, leading to fetal organ agenesis, mutagenesis, and carcinogenesis.

Immunogen: Chemical/ Small Molecule corresponding to Quinolones conjugated to OVA.

Positive control: Quinolones

Recommended Dilutions:

ELISA	1:5,000

Storage Buffer: PBS (pH7.4).

Storage Instruction: Store at +4℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

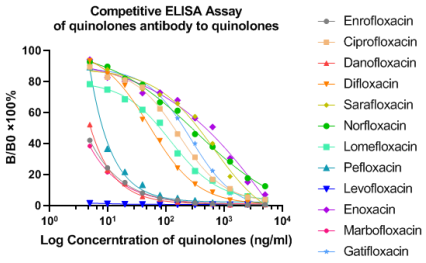

Fig1: Competitive ELISA analysis of quinolones was performed by coating wells of a 96-well plate with 50 µl per well of quinolones-BSA diluted in carbonate/bicarbonate buffer, at a concentration of 1 µg/mL overnight at 4℃. Wells of the plate were washed, blocked with 1% BSA blocking buffer, and incubated with 100 µl per well of quinolones monoclonal antibody (HA721339) at concentration of 0. 5 µg/mL with serial diluted quinolones starting from a concentration of 20ug/ml for 1 hours at room temperature. The plate was washed and incubated with 50 µl per well of an HRP-conjugated Goat anti-Rabbit IgG secondary antibody (HA1001) at a dilution of 1:15,000 for one hour at room temperature. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

Background References

1. Amanda Yan; Emily E. Bryant. Quinolones. Treasure Island (FL): StatPearls Publishing; 2022 Jan-.