

12-8550: Anti-E. coli K99 pili (Clone K9912-444.5)

Clonality :	Monoclonal
Clone Name :	K9912-444.5
Application :	ELISA
Isotype :	Mouse IgG1
Immunogen Information :	Purified E. coli K99 (B44) pili

Description

Specificity

The Clone K9912-444.5 antibody exhibits high specificity for K99+ E. coli. Crucially for diagnostic assay development, this mouse monoclonal antibody demonstrates no cross-reactivity with K99-negative E. coli (B41), E. coli K88ac, E. coli 987P, Proteus mirabilis, Proteus vulgaris, Pseudomonas aeruginosa, Enterobacter aerogenes, Citrobacter freundii, Klebsiella pneumoniae, or Strep. agalactiae.

Background

Bovine enteric colibacillosis is an economically important disease in neonatal calves caused by enterotoxigenic E. coli (ETEC) which adhere to intestinal cells using pili. Most ETEC isolated from cattle use K99 pili to bind to enterocytes of the small intestine. K99 pili are primarily composed of a repeating 18.2kDa major subunit which is responsible for binding to host glycoprotein receptor, N-glycolylneuraminic acid-GM3. A 7.1kb operon of eight genes on a plasmid encode the pili and other associated proteins responsible for regulation, transport, and assembly of K99 pili.

Product Info

Amount :	500 µg / 100 µg
Purification :	Product preparation: Produced under comprehensive ISO 9001 and ISO 13485 quality controls, our antibody preparation guarantees superior lot-to-lot consistency; This product is manufactured in St. Louis, Missouri USA. Each batch is isolated through a specialized multi-step purification cascade that incorporates automated Protein G or Protein A chromatography. This process actively eliminates interfering contaminants, yielding a highly stable antibody with ultra-low endotoxin specifications, trace leachable protein A, and virtually no aggregate artifacts.
Content :	Concentration: Lot Specific Formulation: This monoclonal antibody is formulated in phosphate buffered saline (PBS) pH 7.2 - 7.4 with no carrier protein or preservatives added.
Storage condition :	Upon initial thawing, appropriately aliquot and store at -20°C to -70°C. For long-term storage, keep at -20°C to -70°C. Avoid repeated freeze-thaw cycles.

Application Note

These antibodies have been qualified for use in ELISA to detect K99+ E. coli.