Product Data Sheet

Product Name: Anti-ZnT8 Antibody (mAb43)
Cat. No.: GC81586

Chemical Properties

Cas. No.			
Formula		M.Wt	145.79
Solubility		Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Anti-ZnT8 Antibody (mAb43) is a monoclonal antibody targeting the zinc transporter ZnT8, with islet-specific biodistribution characteristics. Anti-ZnT8 Antibody (mAb43) binds to extracellular ZnT8 on the

surface of pancreatic β-cells and masks its insulin-co-localizing sites to block autoimmune recognition. Anti-ZnT8 Antibody (mAb43) also promotes an increase in the proportion of regulatory T cells and inhibits B cell antigen presentation, thereby effectively blocking the T cell-mediated cascade of β-cell destruction. Anti-ZnT8 Antibody (mAb43) eliminates insulitis, preserves β-cell mass and induces seroconversion of autoantibodies, without directly altering the insulin secretion function or content of β-cells. Anti-ZnT8 Antibody (mAb43) can be used for research related to type 1 diabetes [1].

In Vivo, Anti-ZnT8 Antibody (mAb43) (5 mg/kg; i.v.; weekly; up to 25 weeks) administered from 10 weeks of age provides 100% sustained protection against spontaneous type 1 diabetes onset in female NOD mice through 35 weeks[1]. Anti-ZnT8 Antibody (mAb43) (5 mg/kg; i.v.; weekly; up to 26 weeks) administered from 14 weeks of age provides prolonged protection against spontaneous type 1 diabetes in female NOD mice[1]. Anti-ZnT8 Antibody (mAb43) (5 mg/kg; i.v.; weekly; 11 weeks) has no detectable adverse effects on β-cell function, glucose homeostasis, or insulitis in male B6 db mice with obesity-induced type 2 diabetes[1].

References:
[1]. Kasinathan D, et al. Cell-Surface ZnT8 Antibody Prevents and Reverses Autoimmune Diabetes in Mice. Diabetes. 2024;73(5):806-818.