

Anti-CA19.9 376/H9

Description:

Anti-CA19.9 376/H9 is a mouse monoclonal antibody against **Carbohydrate Antigen 19-9 (CA19-9)**, also known as **sialyl-Lewis-A** antigen. Structurally, CA19-9 is a tetrasaccharide attached to O-glycans of transmembrane proteins with glycosylated extracellular oligosaccharide chains [1].

CA19-9 is an important serum marker for diagnosis, treatment decisions and prognosis of pancreatic ductal adenocarcinoma (PDAC) and biliary tract cancers [2]. Still, there are usage limitations. Amongst others, benign conditions, like pancreatitis, cirrhosis, liver fibrosis or diabetes mellitus, resulting in increased CA19-9 levels can lead to false positive results [1]. Furthermore, the inability of some people with a Lewis (a- b-) blood genotype to produce CA19-9 can lead to false negative results [3].

The antibody is produced exclusively under serum-free conditions from hybridoma and purified through one-step purification with Protein-G affinity chromatography.

Product-ID:	AK1053
Immunogen	Native CA19-9 derived from a human cell line
Host:	Mouse
Clonality:	Monoclonal
Isotype:	IgG1 κ
Formulation:	Clear Liquid, PBS, pH 7.4, 0.2 μm sterile filtered
Concentration:	≥ 0.5 mg/ mL
Purity:	≥ 90% (CGE, reducing conditions); Two bands occur on the order of magnitude of the heavy chain ≤ 10 % aggregates (analytical SEC)
Storage:	2 - 8 °C

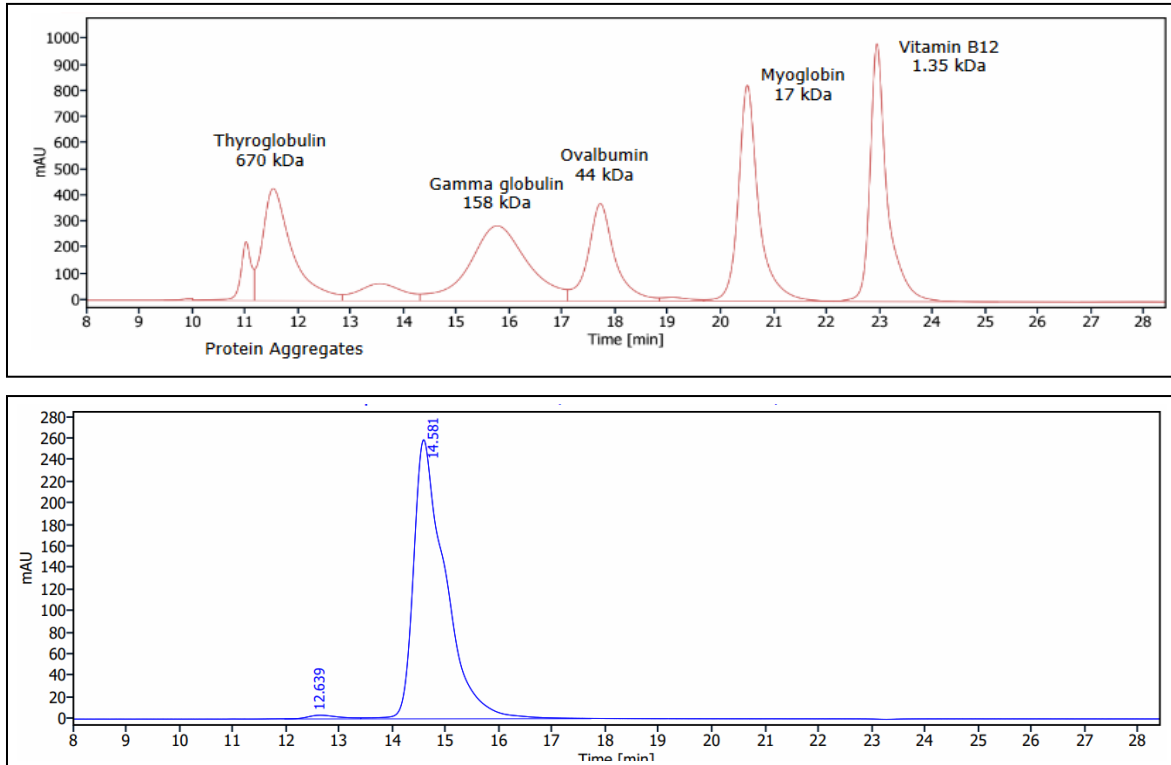
The product is for research use or for further manufacturing only.

Literature:

- [1] T. Lee, T. Z. J. Teng, and V. G. Shelat, "Carbohydrate antigen 19-9 — tumor marker: Past, present, and future," *World J. Gastrointest. Surg.*, vol. 12, no. 12, pp. 468–490, 2020, doi: 10.4240/wjgs.v12.i12.468.
- [2] G. L. Perkins, E. D. Slater, G. K. Sanders, and J. G. Prichard, "Serum tumor markers," *Am. Fam. Physician*, vol. 68, no. 6, pp. 1075–1082, 2003, doi: 10.29309/tpmj/2006.13.01.5043.
- [3] M. Parra-Robert, Víc. M. Santos, S. M. Canis, X. F. Pla, J. M. A. Fradera, and R. M. Porto, "Relationship between CA 19.9 and the lewis phenotype: Options to improve diagnostic efficiency," *Anticancer Res.*, vol. 38, no. 10, pp. 5883–5888, 2018, doi: 10.21873/anticancer.12931.

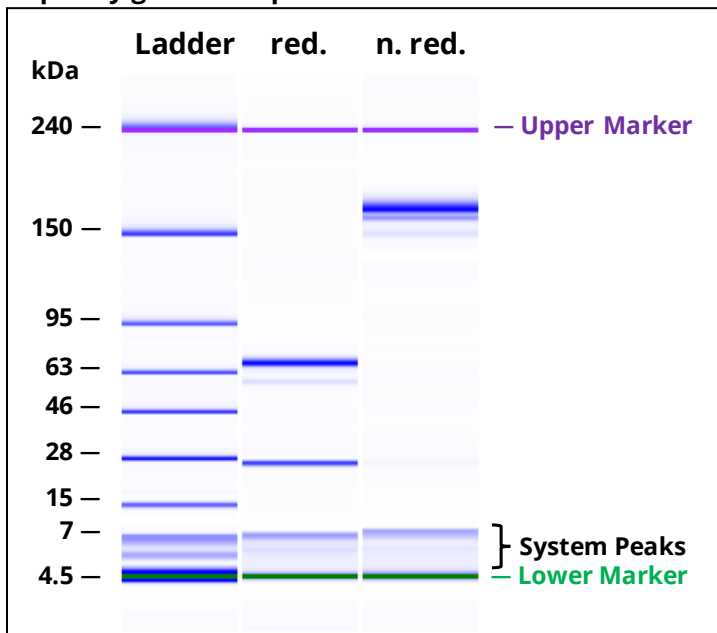
Anti-CA19.9 376/H9 — Supplementary Data

Analytical SEC:



Analytical SEC of purified protein (blue) in comparison with gel filtration standard (red).

Capillary gel electrophoresis:



CGE of the purified protein under reducing (red.) and non-reducing (n. red) conditions.