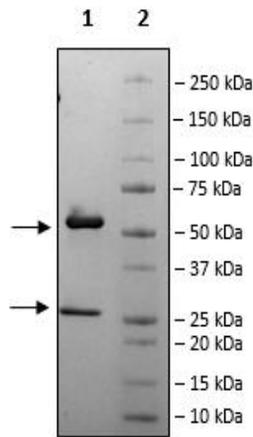


Product Information

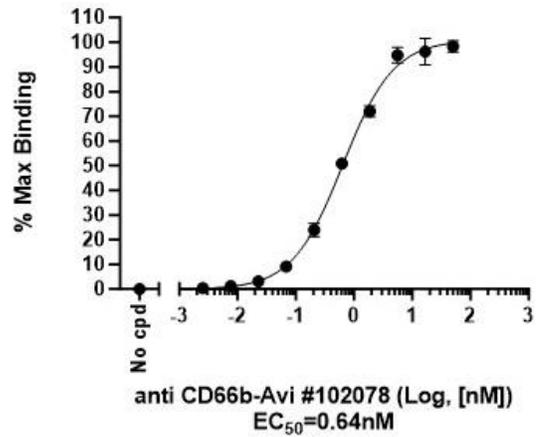
Description:	This anti-CD66b antibody is a purified, recombinant humanized monoclonal antibody that recognizes human CD66b. This construct contains an Avi-tag™ in the middle of the Heavy Chain constant region. This recombinant antibody has been tested for specific binding to purified recombinant human CD66b by ELISA.
Background:	CD66b (cluster of differentiation 66b), also known as CEACAM8 (Carcinoembryonic antigen-related cell adhesion molecule 8), belongs to the CEA family of proteins and the immunoglobulin superfamily, and it is expressed in neutrophils, eosinophils, granulocytes, and monocytes. It was initially described as a granulocyte marker, but recent studies have shown that it is involved in cell adhesion and is a pro-inflammatory mediator. It is highly glycosylated and binds to GPI (glycosylphosphatidylinositol). CD66b ⁺ monocytes can be found in several cancer types and represent a population of cells that do not seem to be involved in immunosuppression but display high phagocytic activity and co-stimulate T cell proliferation and IFN- γ secretion. CD66b ⁺ neutrophils are also present in the tumor microenvironment and it is believed these TIN (tumor infiltrating neutrophils) link to a poor prognosis and can be used to better classify patients for treatment. CD66b antibodies have been used in the case of ADCs (antibody drug conjugate).
Species:	Human
Concentration:	0.30 mg/ml
Expression System:	HEK293
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
MW:	Heavy Chain: 51 kDa + glycans; Light Chain: 23 kDa
Glycosylation:	This antibody runs at a higher MW by SDS-PAGE due to glycosylation.
Label:	This antibody is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation is confirmed to be ≥90%.
Stability:	At least 12 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Assay Conditions:	The antibody was validated by measuring anti-CD66b binding to a CD66b antigen by ELISA. CD66b (#102029) was coated onto a 96-well plate overnight at 4°C (50 μ l/well at a concentration of 2 μ g/ml in PBS). The plate was washed 3 times with Immuno Buffer 1 (#79311) and blocked with 100 μ l/well of Blocking Buffer 2 (#79728) for 1 hour at Room Temperature (RT). After removing the blocking buffer, 50 μ l/well of serially diluted Anti-CD66b Antibody, Biotin-Labeled (#102078), in Blocking Buffer 2, was added for 30 minutes at RT. The plate was washed 3 times and incubated with Streptavidin-HRP, followed by washing, and incubation with Colorimetric HRP substrate. The reaction was stopped, and absorbance was read at λ =450 nm. The Blank value was subtracted from all values.
Applications:	Useful for studying the binding of CD66b in ELISA and in cellular assays.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



CD66b:Anti CD66b-Biotin Binding Assay



Biotin-Avidin Pulldown

