

## Blood Group A Monoclonal Mouse Antibody (HE-10)

### Product Description

This antibody is applicable for staining ABO blood groups A and AB. The histo-blood group ABO involves three carbohydrate antigens: A, B, and H. Blood group antigens are generally defined as molecules formed by sequential addition of saccharides to the carbohydrate side chains of lipids and proteins detected on erythrocytes and certain epithelial cells. Blood group related antigens represent a group of carbohydrate determinants carried on both glycolipids and glycoproteins. They are usually mucin-type, and are detected on erythrocytes, certain epithelial cells, and in secretions of certain individuals. Sixteen genetically and biosynthetically distinct but inter-related specificities belong to this group of antigens, including A, B, H, Lewis A, Lewis B, Lewis X, Lewis Y, and precursor type 1 chain antigens. This antibody preferentially reacts with determinants of chain A and H type 3 (Gal1-3GalNAc-R) and type 4 (Gal1-3GalNAc-R), but not with type 1 and 2 chain structures. It is not reactive with immuno-dominant A trisaccharide. It shows a highly heterogeneous reactivity in human colon tumor tissue and adjacent mucosa. The A, B and H antigens are reported to undergo modulation during malignant cellular transformation. This antibody is available purified with BSA/azide at 200 ug/mL, or BSA/azide-free at 1 mg/mL.

### Product attributes

Antibody number	#1089
Antibody reactivity (target)	Blood Group A
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	HE-10
Isotype	IgM, kappa
Molecular weight	Multiple
Synonyms	ABO Type A; Blood Group A
Human gene symbol	ABO
Entrez gene ID	28
SwissProt	P16442
Unigene	654423
Immunogen	Mixture of erythrocytes of blood group A and glycoprotein fraction isolated from the saliva of secretors with blood group A
Verified antibody applications	IHC (FFPE) (verified)
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Antibody application notes	Immunofluorescence: 0.5-1 ug/mL, Immunohistology (formalin), Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined by user
Positive control	KG1 cells or human colorectal carcinoma tissues.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Hematology