abcam

ab2778

Anti-Nonspecific Cytotoxic Cells antibody [5C.6]

Key facts

Isotype	IgM
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA
Form	Liquid
Clonality	Monoclonal
Clone number	5C.6
Purity	IgM fraction
Concentration	0.73 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Expected

Species	Rat, Pig, Catfish, Tilapia, Dog, Horse, Cow
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt

Expected

Species	Rat
Dilution info	-
Notes	ab91545 - Mouse monoclonal IgM, is suitable for use as an isotype control with this antibody.

Species	Pig
Dilution info	-
Notes	ab91545 - Mouse monoclonal IgM, is suitable for use as an isotype control with this antibody.

Species	Catfish
Dilution info	-
Notes	ab91545 - Mouse monoclonal IgM, is suitable for use as an isotype control with this antibody.

Species	Tilapia
Dilution info	-
Notes	ab91545 - Mouse monoclonal IgM, is suitable for use as an isotype control with this antibody.

Species	Dog
Dilution info	-
Notes	ab91545 - Mouse monoclonal IgM, is suitable for use as an isotype control with this antibody.

Species	Horse
Dilution info	-
Notes	ab91545 - Mouse monoclonal IgM, is suitable for use as an isotype control with this antibody.

Species	Cow
Dilution info	-
Notes	ab91545 - Mouse monoclonal IgM, is suitable for use as an isotype control with this antibody.

ELISA

Expected

Species	Rat, Pig, Catfish, Tilapia, Dog, Horse, Cow
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Expected

Species	Rat
Dilution info	-
Notes	By Western blot, this antibody detects a 32 kDa protein representing nonspecific cytotoxic cell receptor protein.

Species	Pig
Dilution info	-
Notes	By Western blot, this antibody detects a 32 kDa protein representing nonspecific cytotoxic cell receptor protein.

Species	Catfish
Dilution info	-
Notes	By Western blot, this antibody detects a 32 kDa protein representing nonspecific cytotoxic cell receptor protein.

Species	Tilapia
Dilution info	-
Notes	By Western blot, this antibody detects a 32 kDa protein representing nonspecific cytotoxic cell receptor protein.

Species	Dog
Dilution info	-
Notes	By Western blot, this antibody detects a 32 kDa protein representing nonspecific cytotoxic cell receptor protein.

Species	Horse
Dilution info	-
Notes	By Western blot, this antibody detects a 32 kDa protein representing nonspecific cytotoxic cell receptor protein.

Species	Cow
Dilution info	-
Notes	By Western blot, this antibody detects a 32 kDa protein representing nonspecific cytotoxic cell receptor protein.

FuncS (Neut/Block)

Expected

Species	Rat, Pig, Catfish, Tilapia, Dog, Horse, Cow
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information Nonspecific Cytotoxic Cells

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

U.S. Patent Numbers: 5,028,424 and 5,229,494.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Nonspecific Cytotoxic Cells also recognized as NC cells serve an important function in the immune system by targeting and killing virally infected cells and tumor cells without prior sensitization. These cells are a component of the innate immune system and are similar in function to natural killer (NK) cells. Unlike NK cells NC cells do not require specific antigen recognition. Their precise molecular mechanisms remain less defined than other immune cells and their molecular mass is not distinctly characterized. NC cells are primarily found in peripheral blood and lymphoid tissues where they execute their cytotoxic action.
Biological function summary	These immune cells play an important defensive role by eliminating cells that might otherwise evade the adaptive immune response. NC cells achieve this through the release of cytotoxins that induce apoptosis in target cells. They are not known to be part of multi-protein complexes and their activity is largely independent acting through perforin and granzymes. Their function also overlaps with natural killer cells and they contribute to bridging innate and adaptive immunity due to their rapid response capabilities.
Pathways	Nonspecific cytotoxic cells engage with key immune-related pathways such as the innate immune response pathway and the apoptosis signaling pathway. In the innate immune response they interact with proteins such as perforin and granzymes which are important for their cytotoxic activity. The apoptosis signaling pathway involves these cytotoxins leading to the programmed cell death of target cells. Their role in these pathways highlights their importance in initial immune defense and regulation of cell survival.
Associated diseases and disorders	Nonspecific cytotoxic cells show relevance to conditions like viral infections and cancer. They are a critical early defense against viral infections where their ability to kill infected cells minimizes viral spread. These cells also hold implications in cancer where their ability to recognize and eliminate tumor cells aids in tumor surveillance. The activity of proteins like perforin links NC cells to these diseases as both the defense against infection and tumor surveillance rely on efficient cytotoxic mechanisms.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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