abcam

ab155577

Anti-Basophils antibody [2D7]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS, 0.1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing Basophils protein. The exact immunogen used to generate this antibody is proprietary information.
Clone number	2D7
Purification technique	Affinity purification Protein G
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Expected

Species	Human
Dilution info	-
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

WB

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Expected

Species	Human
Dilution info	-
Notes	Fresh surgical tissues can be fixed in Carnoy's fluid for 24 h and transferred to absolute ethanol.

ICC/IF

Expected

Species	Human
Dilution info	-
Notes	Cytospin preparations should be fixed in methanol for 15 min, incubated in methanol containing 0.6% H2O2, for 30 min to block endogenous peroxidase.

IHC-Fr

Expected

Species	Human
Dilution info	-
Notes	Fix in either 10% NBF or Carnoy's fluid for 15 minutes at RT.

Target data

See full target information Basophils

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
Storage information	Avoid freeze / thaw cycle

Supplementary info

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

Activity summary	Basophils known alternatively as 'basophil granulocytes' are a type of white blood cell with a mass around 0.6 picograms. You find these cells in the bloodstream where they are released from the bone marrow. They have a low abundance in peripheral blood typically accounting for about 0.1% of white blood cells. Basophils express surface markers such as CD123 and the high-affinity receptor for IgE (FcεRI). They are rich in granules that contain heparin histamine and various cytokines.
Biological function summary	Basophils play an important role in immune response regulation particularly in allergic reactions and parasitic infections. Basophils do not form part of a complex but interact dynamically with other immune cells. Released substances from their granules contribute to inflammation and help control the intensity of the immune response. Basophil markers including 2D7 help identify these cells and examine their function in immunological studies.
Pathways	Basophils are critical players in the Th2 immune response pathway and the allergic inflammation pathway. In the Th2 response basophils secrete cytokines that promote the activation and differentiation of T-helper 2 (Th2) cells. They relate to other proteins like IL-4 and IL-13 which are significant in the mediation of allergic responses. Basophils contribute to the recruitment and activation of other immune cells like eosinophils through the secretion of cytokines and chemokines.
Associated diseases and disorders	Basophils are significant contributors to conditions such as asthma and systemic anaphylaxis. They have been connected to the pathophysiology of these diseases through their role in mediating excessive allergic reactions. Basophils interact closely with proteins such as histamine amplifying the symptoms during these hypersensitivity conditions. Understanding basophil markers has improved diagnostic and therapeutic strategies in managing allergic diseases.

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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