

Monoclonal Antibody to Granulocytes (Neutrophil Lineage) - FITC

Alternate names:	Granulocyte cells
Catalog No.:	AM05606FC-N
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	<p>Granulocytes are a type of white blood cell filled with microscopic granules that are little sacs containing enzymes, compounds that digest microorganisms. They are part of the innate immune system and have somewhat nonspecific, broad-based activity. They do not respond exclusively to specific antigens, as do B-cells and T-cells.</p> <p>Neutrophils, eosinophils and basophils are all types of granulocytes. They are named by the staining features of their granules in the laboratory: Neutrophils have "neutral" subtle granules; Eosinophils have prominent granules that stain readily with the acid dye eosin; and Basophils have prominent granules that stain readily basic (non acidic) dyes.</p>
Host / Isotype:	Mouse / IgG2a
Clone:	6D10
Immunogen:	<p>Porcine bone marrow haematopoietic cells (BMHC).</p> <p>Remarks: Spleen cells from immunised Balb/c mouse were fused with cells of the SP2/0 mouse myeloma cell line.</p>
Format:	<p>State: Liquid purified IgG fraction.</p> <p>Purification: Affinity Chromatography on Protein G.</p> <p>Buffer System: PBS containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer.</p> <p>Label: FITC – Fluorescein Isothiocyanate Isomer 1</p>
Applications:	<p>Flow Cytometry: Use 10 µl of neat-1/5 diluted antibody to label 1x10⁶ cells in 100 µl. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>

Specificity:

This antibody specifically recognises a 60kDa antigen on Porcine Granulocytes of the neutrophil lineage, acting as a reliable tool for their analysis and isolation, without contamination from other cells.

Expression of the antigen recognised by clone 6D10 decreases from the immature promyelocytes, through myelocytes and metamyelocytes, to the mature neutrophils, thereby enabling the identification of neutrophil developmental stages. Furthermore, use of clone 6D10 in conjunction with clone 2B2 (Cat.Nr AM05607FC-N), allows for the discrimination and characterisation of different porcine granulocyte lineages and also their developmental stages: 6D10- 2B2- early myeloid precursors, 6D10+2B2-immature neutrophils, 6D10+ 2B2+ mature neutrophils and 6D10- 2B2+ mature eosinophils and basophils.

Clone 6D10 has been shown as suitable for use on Cytospins. (See Reference 1).

Species: Pig.

Other species not tested.

Storage:

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

General Readings:

1. Pérez C, Revilla C, Alvarez B, Chamorro S, Correa C, Domenech N, et al. Phenotypic and functional characterization of porcine granulocyte developmental stages using two new markers. *Dev Comp Immunol.* 2007;31(3):296-306. Epub 2006 Jul 26. PubMed PMID: 16919332.

2. Piriou-Guzylack L, Salmon H. Membrane markers of the immune cells in swine: an update. *Vet Res.* 2008 Nov-Dec;39(6):54. doi: 10.1051/vetres:2008030. Epub 2008 Jul 19. PubMed PMID: 18638439.