abcam

Product datasheet

Anti-Neutrophil Elastase antibody [EPR7479] ab131260

Recombinant RabMAb

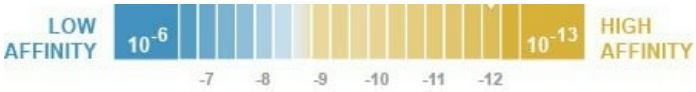
4 Abreviews 15 References 10 Images

Overview

Product name	Anti-Neutrophil Elastase antibody [EPR7479]
Description	Rabbit monoclonal [EPR7479] to Neutrophil Elastase
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HL60 cell lysate; Human bone marrow tissue
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. **We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.** Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K_D = 6.00 x 10^{-12} M



Learn more about K_D

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7479
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab131260 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

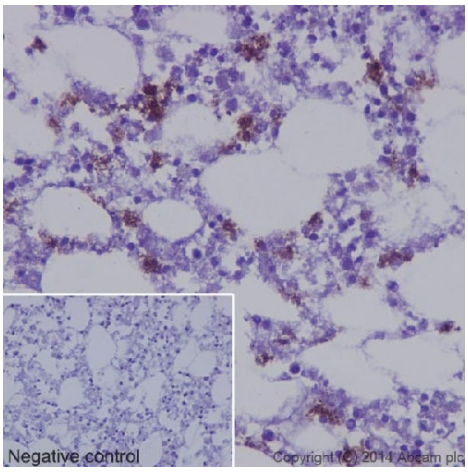
Application	Abreviews	Notes
Flow Cyt (Intra)		1/20. For unpurified use at 1/10 - 1/100. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/5000. Predicted molecular weight: 29 kDa.
IHC-P	★★★★★ (2)	1/5000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. **For unpurified use at 1/250 - 1/500.** See protocols **IHC antigen retrieval protocols**.
ICC/IF	★★★★★ (1)	1/70. **For unpurified use at 1/250 - 1/500**

Target

Function	Modifies the functions of natural killer cells, monocytes and granulocytes. Inhibits C5a-dependent neutrophil enzyme release and chemotaxis.
Tissue specificity	Bone marrow cells.
Involvement in disease	Defects in ELANE are a cause of cyclic haematopoiesis (CH) [MIM:162800]; also known as cyclic neutropenia. CH is an autosomal dominant disease in which blood-cell production from the bone marrow oscillates with 21-day periodicity. Circulating neutrophils vary between almost normal numbers and zero. During intervals of neutropenia, affected individuals are at risk for opportunistic infection. Monocytes, platelets, lymphocytes and reticulocytes also cycle with the same frequency. Defects in ELANE are the cause of neutropenia severe congenital autosomal dominant type 1 (SCN1) [MIM:202700]. SCN1 is a disorder of hematopoiesis characterized by a maturation arrest of granulopoiesis at the level of promyelocytes with peripheral blood absolute neutrophil counts

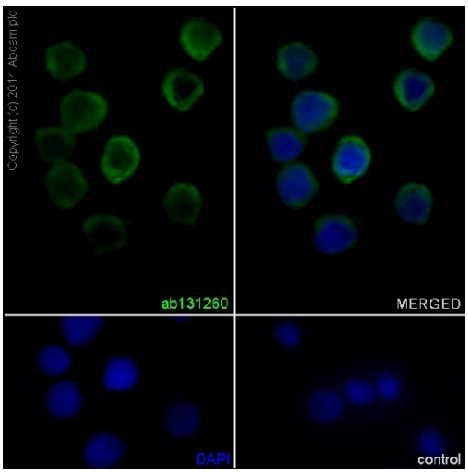
	below 0.5 x 10(9)/l and early onset of severe bacterial infections.
Sequence similarities	Belongs to the peptidase S1 family. Elastase subfamily. Contains 1 peptidase S1 domain.

Images



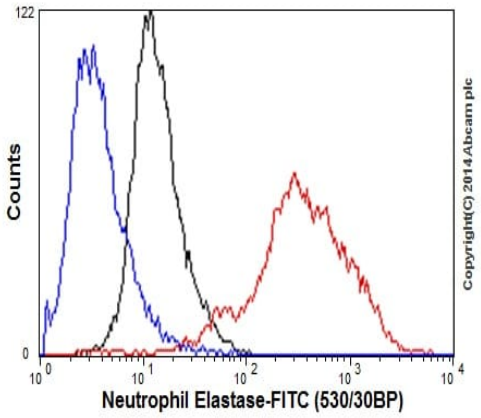
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neutrophil Elastase antibody [EPR7479] (ab131260)

ab131260 staining Neutrophil Elastase in Human bone marrow tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed and paraffin-embedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/5000). An undiluted HRP-conjugated mouse anti-rabbit IgG was used as the secondary antibody. Tissue counterstained with Hematoxylin. PBS was used in the negative control rather than the Primary antibody.



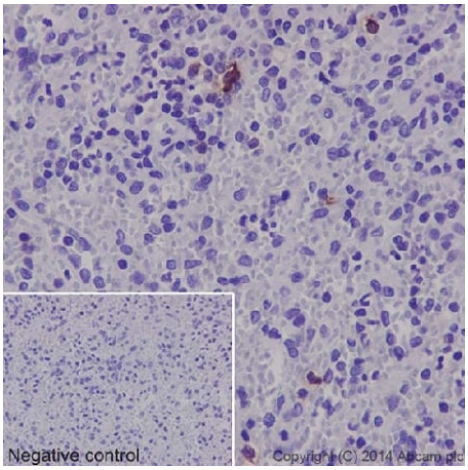
Immunocytochemistry/ Immunofluorescence - Anti-Neutrophil Elastase antibody [EPR7479] (ab131260)

ab131260 staining Neutrophil Elastase in the HL-60 cell line by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody (1/70). **ab150120**(1/500) an Alexa Fluor®594-conjugated Goat anti-rabbit IgG was used as the secondary antibody. Nuclei were counterstained with DAPI.



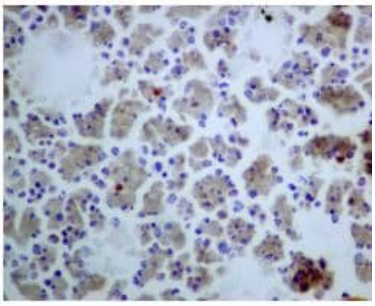
Flow Cytometry (Intracellular) - Anti-Neutrophil Elastase antibody [EPR7479] (ab131260)

Overlay histogram showingHL-60 cells stained with ab131260 (red line) at 1/20 dilution. The cells were fixed with 80% methanol. The secondary antibody used wasa FITC conjugatedgoat anti-rabbit IgG at 1/150 dilution. Isotype control antibody (black line) wasrabbit monoclonal IgG used under the same conditions. Cells also incubated without primary antibody and secondary antibody (blue line)



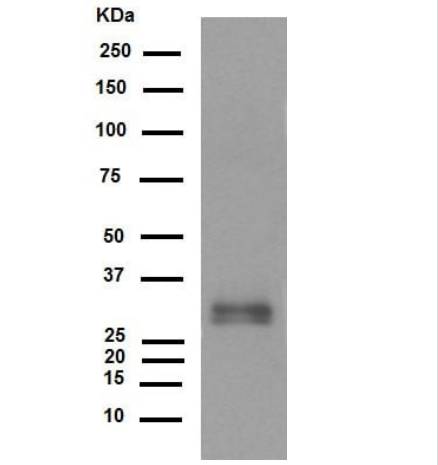
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neutrophil Elastase antibody [EPR7479] (ab131260)

ab131260 staining Neutrophil Elastase in Human spleen tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed and paraffin-embedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/5000). An undiluted HRP-conjugated mouse anti-rabbit IgG was used as the secondary antibody. Tissue counterstained with Hematoxylin. PBS was used in the negative control rather than the Primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neutrophil Elastase antibody [EPR7479] (ab131260)

Immunohistochemical analysis of paraffin-embedded Human bone marrow tissue labelling Neutrophil Elastase with unpurified ab131260 at 1/250 dilution.



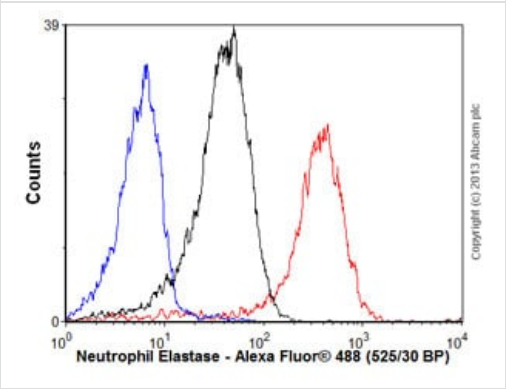
Western blot - Anti-Neutrophil Elastase antibody [EPR7479] (ab131260)

Anti-Neutrophil Elastase antibody [EPR7479] (ab131260) at 1/1000 dilution + HL-60 Cell Lysate at 10 µg

Secondary

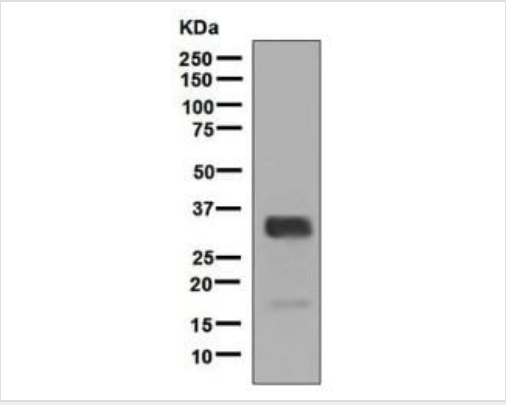
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 29 kDa
Observed band size: 29 kDa



Flow Cytometry (Intracellular) - Anti-Neutrophil Elastase antibody [EPR7479] (ab131260)

Overlay histogram showing HL60 cells stained with unpurified ab131260 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab131260, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was goat anti-rabbit Alexa Fluor® 488 (IgG H+L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-Neutrophil Elastase antibody [EPR7479] (ab131260)

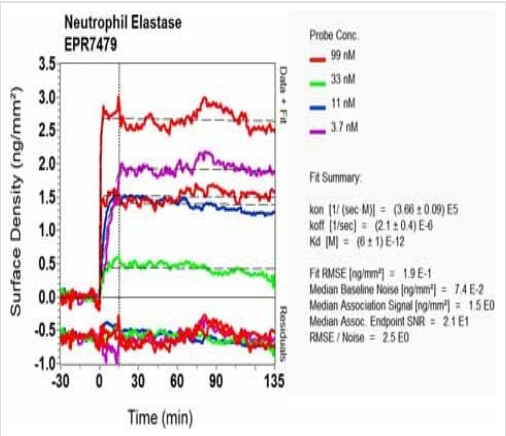
Anti-Neutrophil Elastase antibody [EPR7479] (ab131260) at 1/1000 dilution (Unpurified) + HL60 cell lysate at 10 µg

Secondary

HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 29 kDa

Secondary antibody - goat **anti-rabbit HRP** (**ab6721**)

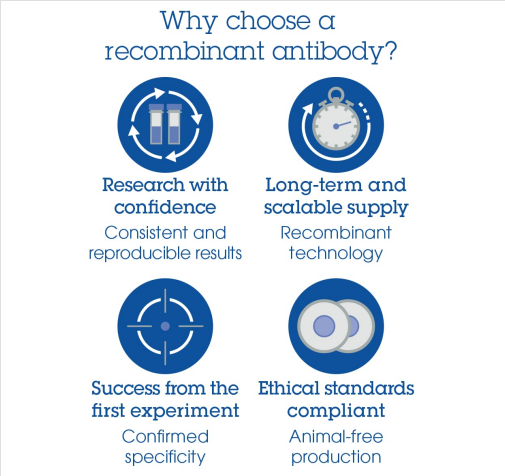


OI-RD Scanning - Anti-Neutrophil Elastase antibody [EPR7479] (ab131260)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Anti-Neutrophil Elastase antibody [EPR7479]

(ab131260)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors