

# AIRE Monoclonal Antibody (5H12), eFluor 660, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotope	Rat / IgG2c, kappa
Class	Monoclonal
Type	Antibody
Clone	5H12
Conjugate	eFluor® 660
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2574257

Applications	Tested	Dilution	Published
Flow Cytometry (Flow)	✓	Assay-Dependent	4 Publications
Immunofluorescence (IF)	✓	10 µg/mL	4 Publications
Immunohistochemistry (IHC)	-		1 Publication
ChIP assay (ChIP)	-		1 Publication
Western Blot (WB)	-		1 Publication
Immunocytochemistry (ICC)	✓	10 µg/mL	
Immunohistochemistry (Frozen) (IHC (F))	✓	10 µg/mL	

## Product Specific Information

Description: This 5H12 monoclonal antibody reacts with mouse Autoimmune Regulator (AIRE). This 58-kDa transcription factor is highly expressed within the perinuclear region of mature medullary thymic epithelial cells (mTECs). However, expression of AIRE protein in the periphery remains unclear despite the detection of AIRE mRNA in the lymph node, lymphoid stromal cells, monocytes, and dendritic cells. Studies demonstrate that AIRE is involved in thymocyte development, in particular the regulation of tissue-specific antigen expression during negative selection. Other biological functions for AIRE include chemokine expression and antigen presentation.

The 5H12 antibody recognizes mouse AIRE isoforms 1 and 2.

Applications Reported: This 5H12 antibody has been reported for use in intracellular flow cytometric analysis and immunohistochemical staining of frozen tissue sections.

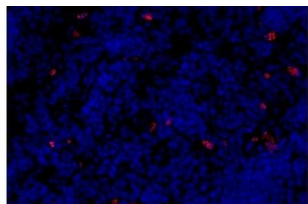
Applications Tested: This 5H12 antibody has been tested by immunohistochemistry on frozen 5-week-old mouse thymus and can be used at less than or equal to 10 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

eFluor® 660 is a replacement for Alexa Fluor® 647. eFluor® 660 emits at 659 nm and is excited with the red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 633-647 nm; Emission: 668 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

### Product Images For AIRE Monoclonal Antibody (5H12), eFluor 660, eBioscience™



#### AIRE Antibody (50-5934-82) in IHC (F)

Immunohistochemistry on frozen 5-week-old mouse thymus using 10 µg/mL of Anti-Mouse AIRE eFluor® 660. Nuclei are counterstained with DAPI.

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[View more figures on thermofisher.com](https://www.thermofisher.com)

## 11 References

### Flow Cytometry (4)

eLife  
**CCR7 defines a precursor for murine iNKT cells in thymus and periphery.**

Authors: Wang H,Hogquist KA

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2018

**Journal of immunology (Baltimore, Md. : 1950)**  
**Osteoprotegerin-Mediated Homeostasis of Rank+ Thymic Epithelial Cells Does Not Limit Foxp3+ Regulatory T Cell Development.**

"50-5934 was used in Flow cytometry/Cell sorting to elucidate the conditions controlling medullary thymic epithelial cell (mTEC) homeostasis and the production of mTEC-dependent Foxp3(+) Tregs."

Authors: McCarthy NI,Cowan JE,Nakamura K,Bacon A,Baik S,White AJ,Parnell SM,Jenkinson EJ,Jenkinson WE, Anderson G

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2015

[View more Flow references on thermofisher.com](#)

### Immunofluorescence (4)

JCI insight  
**A human PSMB11 variant affects thymoproteasome processing and CD8+ T cell production.**

"50-5934 was used in Immunofluorescence to show that a human genomic PSMB11 variation alters the amino acid sequence of 5t which affects the processing of catalytically active protein."

Authors: Ohigashi I,Ohte Y,Setoh K,Nakase H,Maekawa A,Kiyonari H,Hamazaki Y,Sekai M,Sudo T,Tabara Y,Sawai H, Omae Y,Yuliwulandari R,Tanaka Y,Mizokami M,Inoue H,Kasahara M,Minato N,Tokunaga K,Tanaka K,Matsuda F, Murata S,Takahama Y

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2017

**The Journal of experimental medicine**  
**Epithelial Fli1 deficiency drives systemic autoimmunity and fibrosis: Possible roles in scleroderma.**

"Published figure using AIRE monoclonal antibody (Product # 50-5934-82) in Immunofluorescence"

Authors: Takahashi T,Asano Y,Sugawara K,Yamashita T,Nakamura K,Saigusa R,Ichimura Y,Toyama T,Taniguchi T, Akamata K,Noda S,Yoshizaki A,Tsuruta D,Trojanowska M,Sato S

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2017

[View more IF references on thermofisher.com](#)

### More applications with references on thermofisher.com

**IHC (1)** **ChIP (1)** **WB (1)**

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