Anti-IRF-7 antibodies, human

For research use only

One test corresponds to labeling of up to 10^7 cells in a total volume of 100 µL.

Product	Content	Order no.
Anti-IRF-7-FITC	for 30 tests	130-108-904
Anti-IRF-7-FITC	for 100 tests	130-108-874
Anti-IRF-7-PE	for 30 tests	130-108-905
Anti-IRF-7-PE	for 100 tests	130-108-875
Anti-IRF-7-APC	for 30 tests	130-108-906
Anti-IRF-7-APC	for 100 tests	130-108-876

Warnings

Reagents contain sodium azide. Under acidic conditions sodium azide yields hydrazoic acid, which is extremely toxic. Azide compounds should be diluted with running water before discarding. These precautions are recommended to avoid deposits in plumbing where explosive conditions may develop.

Technical data and background information

Antigen	IRF-7
Clone	REA521
Isotype	recombinant human IgG1
Isotype control	REA Control (I) antibodies
Alternative names of antigen	IRF7, IMD39, IRF-7H, IRF7A, IRF7B, IRF7C
Molecular mass of antigen [kDa]	54
Distribution of antigen	dendritic cells, lymphocytes, other
Product format	Reagents are supplied in buffer containing stabilizer and 0.05% sodium azide.
Fixation	The antibody is suited for staining of formaldehyde-fixed cells.
Storage	Store protected from light at 2–8 °C. Do not freeze.

Clone REA521 recognizes the human interferon regulatory factor 7 (IRF-7) antigen, regardless of phosphorylation status. IRF-7 is a member of the IRF family of transcription factors and a key player in the innate immune response against viral infections. Constitutive expression of IRF-7 is limited to peripheral blood lymphocytes and dendritic cells while in most cell types its expression can be induced by type I interferon. IRF-7 is sequestered in the cytoplasm of uninfected cells and following viral infection, double-stranded RNA, or toll-like receptor signaling, it becomes phosphorylated by TBK and IKK-i kinases. Phosphorylated IRF-7 migrates in the nucleus where it can activate interferon type I genes and other interferon-stimulated genes.
Additional information: Clone REA521 displays negligible binding to Fc receptors.

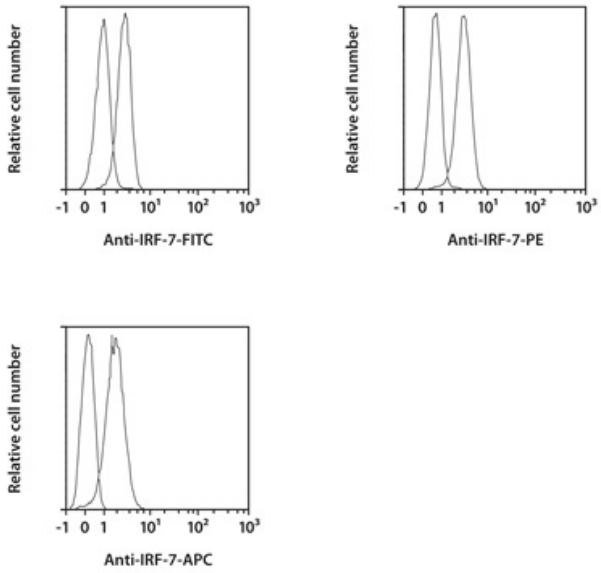
Reagent requirements

- Buffer: Prepare a solution containing phosphate-buffered saline (PBS), pH 7.2, 0.5% bovine serum albumin (BSA), and 2 mM EDTA by diluting MACS® BSA Stock Solution (# 130-091-376) 1:20 with autoMACS® Rinsing Solution (# 130-091-222). Keep buffer cold (2−8 °C).
  Note: EDTA can be replaced by other supplements such as anticoagulant citrate dextrose formula-A (ACD-A) or citrate phosphate dextrose (CPD). Buffers or media containing Ca^{2+} or Mg^{2+} are not recommended for use.
- Cell Signaling Buffer Set A (# 130-100-827) for cell fixation and permeabilization to analyze intracellular proteins belonging to cell signal transduction pathways by flow cytometry.

For a detailed protocol for immunofluorescent staining please refer to the data sheet of the Cell Signaling Buffer Set A available on the respective product page at www.miltenyibiotec.com/130-100-827.

Examples of immunofluorescent staining

HEK-EBNA cells were fixed and permeabilized using the Cell Signaling Buffer Set A. Cells were then stained with Anti-IRF-7 antibodies or with the corresponding REA Control (I) antibodies (left peak) and analyzed by flow cytometry using the MACSQuant® Analyzer. Cell debris were excluded from the analysis based on scatter signals.



References

1. **Zhang L. *et al.*** (1997) IRF-7, a new interferon regulatory factor associated with Epstein-Barr virus latency. Mol. Cell. Biol. 17(10): 5748–5757.
2. **Smith, E. J. *et al.*** (2001) IRF3 and IRF7 phosphorylation in virus-infected cells does not require double-stranded RNA-dependent protein kinase R or Ikappa B kinase but is blocked by Vaccinia virus E3L protein. J. Biol. Chem. 276(12): 8951–8957.
3. **Sgarbanti, M. *et al.*** (2007) IRF-7: new role in the regulation of genes involved in adaptive immunity. Ann. N. Y. Acad. Sci. 1095: 325–333.

Warranty

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