## IL-1α (D4F3S) Rabbit mAb (PE Conjugate)



Orders: 877-616-CELL (2355)

orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com

cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

## For Research Use Only. Not for Use in Diagnostic Procedures.

<b>Applications:</b> FC-FP	<b>Reactivity:</b> M	<b>Sensitivity:</b> Endogenous	<b>Source/Isotype:</b> Rabbit IgG	UniProt ID: #P01582	Entrez-Gene Id: 16175	
Product Usage Information		<b>Application</b> Flow Cytometry (Fixed/F	Permeabilized)		<b>Dilution</b> 1:50	
Storage			plied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the body. Protect from light. Do not freeze.			
Specificity/Sensitivity		IL-1 $\alpha$ (D4F3S) Rabbit mAb (PE Conjugate) recognizes endogenous levels of total IL-1 $\alpha$ protein.				
Source / Purification		Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the carboxy terminus of mouse IL-1 $\alpha$ protein.				
Description		This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct flow cytometric analysis in human cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated IL-1 $\alpha$ (D4F3S) Rabbit mAb #50794.				
Background		Interleukin 1 alpha (IL-1 $\alpha$ ) belongs to the IL-1 family of cytokines with 11 members including IL-1 $\beta$ . IL-1 $\alpha$ is expressed in many cell types of both hematopoietic and non-hematopoietic origins under steady state, and its expression can be increased in response to appropriate stimuli (1,2). Like IL-1 $\beta$ , IL-1 $\alpha$ is also synthesized as a precursor (pro-IL-1 $\alpha$ ) and can be cleaved into smaller mature forms. However, both pro-IL-1 $\alpha$ and the cleaved form of IL-1 $\alpha$ are biologically active and can activate the signaling pathway through the membrane receptor IL-1 $\alpha$ 1. IL-1 $\alpha$ 1 is active both as a secreted form and as a membrane-bound form. Due to such characteristics, passive leakage of IL-1 $\alpha$ 1 from dying cells can activate inflammation, leading some researchers to consider IL-1 $\alpha$ 2 as a key "alarmin in the cell" that alerts the host to damage or injury (3,4). In addition, IL-1 $\alpha$ 2 can also enter the nucleus to modulate transcription (5,6).				
Background Refe	rences	1. Garlanda, C. et al. (2013) <i>Immunity</i> 39, 1003-18. 2. Palomo, J. et al. (2015) <i>Cytokine</i> 76, 25-37. 3. Bertheloot, D. and Latz, E. (2017) <i>Cell Mol Immunol</i> 14, 43-64. 4. Di Paolo, N.C. and Shayakhmetov, D.M. (2016) <i>Nat Immunol</i> 17, 906-13. 5. Lamacchia, C. et al. (2013) <i>Cytokine</i> 63, 135-44. 6. Rider, P. et al. (2013) <i>Semin Immunol</i> 25, 430-8.				

**Species Reactivity** 

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Applications Key** 

**FC-FP:** Flow Cytometry (Fixed/Permeabilized)

**Cross-Reactivity Key** 

M: Mouse

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

XP is a registered trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

**Limited Uses** 

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any

purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.