

**DATASHEET**

**USP18 Rabbit Polyclonal Antibody**

CAT. NO. APA17259

**KEY FEATURES**

|               |   |               |                     |
|---------------|---|---------------|---------------------|
| Target        | USP18   | Source / Host | Rabbit              |
| Reactivity    | Human, Mouse  | Clonality     | Polyclonal          |
| Applications  | WB, IF/ICC  | Conjugation   | Unconjugated        |
| Form / Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |               | Storage<br>at -20°C |

**BACKGROUND**

Interferon-induced ISG15-specific protease that plays a crucial role for maintaining a proper balance of ISG15-conjugated proteins in cells . Regulates protein ISGylation by efficiently cleaving ISG15 conjugates linked via isopeptide bonds. Regulates T-cell activation and T-helper 17 (Th17) cell differentiation by deubiquitinating TAK1, likely to keep TAK1-TAB complexes in steady conditions . In turn, restricts activation of NF-kappa-B, NFAT, and JNK as well as expression of IL2 in T-cells after TCR activation . Acts as a molecular adapter with USP20 to promote innate antiviral response through deubiquitinating STING1 . Involved also in the negative regulation of the inflammatory response triggered by type I interferon .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

|        |                |
|--------|----------------|
| WB     | 1:500 - 1:2000 |
| IF/ICC | 1:50 - 1:200   |

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

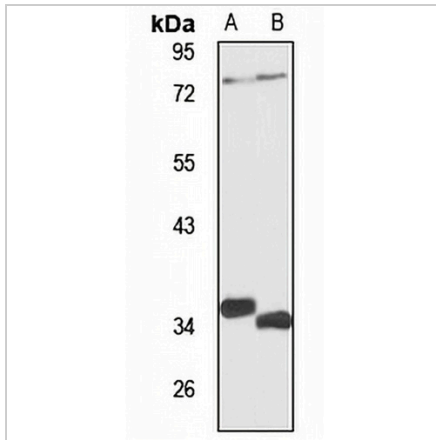
|                   |  |
|-------------------|--|
| Description       | Rabbit polyclonal antibody to USP18  |
| Specificity       | Recognizes endogenous levels of USP18 protein  |
| Antibody Type     | Primary antibody   |
| Immunogen         | Recombinant fusion protein of human USP18. The exact sequence is proprietary.  |
| Purification      | The antibody was purified by immunogen affinity chromatography.  |
| Molecular Weight  | Predicted: 43 kD; Observed: 34; 39 kD  |
| Form/Buffer       | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.                                  |
| Alternative Names | ISG43; Ubl carboxyl-terminal hydrolase 18; 43 kDa ISG15-specific protease; hUBP43; ISG15-specific-processing protease; Ubl thioesterase 18 |
| Gene Symbol       | USP18  |
| Entrez Gene       | 11274(Human); 24110(Mouse)   |
| SwissProt         | Q9UMW8(Human); Q9WTV6(Mouse)   |

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

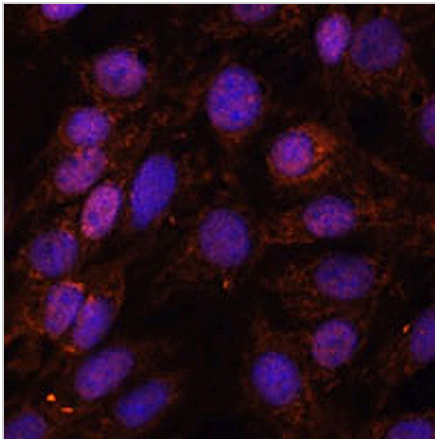
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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**DATA**

Western blot analysis of USP18 expression in HepG2 (A), RAW264.7 (B) whole cell lysates. (Predicted band size: 43 kD; Observed band size: 34; 39 kD)



Immunofluorescent analysis of USP18 staining in C6 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.