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# Datasheet for 600-401-476 UBP43 Antibody

### **Overview**

Description:	Anti-UBP43 (RABBIT) Antibody - 600-401-476
Item No.:	600-401-476
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

## **Product Details**

Background:	UBP43 (also known as ISG43, Ubl thiolesterase 18, ISG15-specific processing protease, 43 kDa ISG15-specific protease, ubiquitin specific protease 18 or USP18) is a member of the deubiquitinating protease family of enzymes, which removes ubiquitin adducts from a broad range of protein substrates. Deletion of the UBP43 gene in mouse leads to a massive increase of ISG15 conjugates in tissues indicating that UBP43 is a major ISG15-specific protease. UBP43 is the first ISG15-specific protease reported. Both ISG15 and UBP43 genes are known to be strongly induced by interferon, genotoxic stress, and viral infection. Thus UBP43 may be necessary to maintain a critical cellular balance of ISG15-conjugated proteins in both healthy and stressed organisms.
Synonyms:	rabbit anti-UBP43 antibody, rabbit anti-USP18 antibody, rabbit anti-ISG43 antibody, 43 kDa ISG15 specific protease antibody, hUBP43 antibody, Interferon Stimulated Gene 43 kD antibody, ISG15 Specific Processing Protease antibody, ISG43 antibody, Ubiquitin Specific Peptidase 18 antibody, Ubl carboxyl-terminal hydrolase 18, Ubl thioesterase 18
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

# **Target Details**

Gene Name:	USP18
Reactivity:	Human



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Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near aa 25-50 of human UBP43 protein.
Purity/Specificity:	This affinity-purified antibody is directed against human UBP43 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, chimpanzee and orangutan based on 100% homology for the immunogen sequence. The core 7 amino acid sequence QPRERPR of the 10 amino acid immunogen sequence may be reactive with UBP43 from mouse and dog. This core sequence also shows partial homology with proteins other than UBP43. Cross reactivity with UBP43 homologues from other sources has not been determined.
Relevant Links:	<ul> <li>UniProtKB - Q9UMW8</li> <li>NCBI - 32313610</li> <li>GeneID - 11274</li> </ul>

# **Application Details**

ELISA, WB			
This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 43 kDa in size corresponding to UBP43 by western blotting in the appropriate cell lysate or extract.			
All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.			
1:10,000 - 1:50,000			
User Optimized			
1:500 - 1:2,000			

## **Formulation**

Physical State:	Liquid (sterile filtered)
Concentration:	0.9 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

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### **Shipping & Handling**

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

#### Images

	1	2	3	4	5
250kDa —					
150kDa —					
100kDa					-
75kDa —					12
	-	-		-	-
50kDa —	-	-		=	-
$\Rightarrow$	-	-	-	-	-
37KDa —	-	-			-
	-	-		-	-
25kDa —			10		
20kDa-					

#### Western Blot

Western blot using Rockland's Affinity Purified anti-UBP43 antibody. Lane 1: HeLa nuclear extracts (p/n W09-001-367). Lane 2: HeLa whole cell lysates (W09-000-364). Lane 3: A431 whole cell lysates (p/n W09-000-361). Lane 4: Jurkat whole cell lysates (W09-001-370). Lane 5: HEK293 whole cell lysates (p/n W09-000-365). Load: 18 µg. Primary Antibody: anti-UBP43 at 1:500. Shows detection of a band ~43 kDa band (arrowhead) believed to be to UBP43 in lysates. The strong band between the 37kD and 50kD markers is expected to be UBP43. The other bands are probably nonspecific.

#### Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.