

## Immunotag™ HAUSP/USP7 mouse mAb

| Antibody Specification |                                                                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Catalog No.            | ITM1254                                                                                                                                                            |
| Product Description    | Immunotag™ HAUSP/USP7 mouse mAb                                                                                                                                    |
| Size                   | 50 µg, 100 µg                                                                                                                                                      |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                      |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return. |
| Target Protein         | HAUSP                                                                                                                                                              |
| Clonality              | Monoclonal                                                                                                                                                         |
| Storage/Stability      | -20°C/1 year                                                                                                                                                       |
| Application            | WB                                                                                                                                                                 |
| Recommended Dilution   | wb 1:200                                                                                                                                                           |
| Concentration          | 1 mg/ml                                                                                                                                                            |
| Reactive Species       | Human                                                                                                                                                              |
| Host Species           | Mouse                                                                                                                                                              |
| Immunogen              | Purified recombinant human HAUSP / USP7 protein fragments expressed in E.coli.                                                                                     |
| Specificity            | This antibody detects endogenous levels of HAUSP / USP7 and does not cross-react with related proteins.                                                            |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                               |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                            |
| Gene Name              | usp7                                                                                                                                                               |
| Accession No.          | Q93009 Q6A4J8                                                                                                                                                      |

## Antibody Specification

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| Alternate Names          | Deubiquitinating enzyme 7;HAUSP;herpes virus associated;Herpes virus associated ubiquitin specific protease;Herpesvirus-associated ubiquitin-specific protease;TEF 1;tef-1;TEF1;Ubiquitin carboxyl terminal hydrolase 7;Ubiquitin carboxyl-terminal hydrolase 7;Ubiquitin specific peptidase 7 (herpes virus associated);Ubiquitin specific peptidase 7;Ubiquitin specific peptidase 7 herpes virus associated;Ubiquitin specific processing protease 7;Ubiquitin specific protease 7 (herpes virus associated);Ubiquitin Specific Protease 7;Ubiquitin specific protease 7 herpes virus associated;Ubiquitin thioesterase 7;ubiquitin thiolesterase 7;Ubiquitin-specific-processing protease 7;UBP 7;UBP-7;UBP7;UBP7_HUMAN;USP 7;usp-7;USP7;VMW110-ASSOCIATED PROTEIN,135-KD.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Description              | ubiquitin specific peptidase 7(USP7) Homo sapiens The protein encoded by this gene belongs to the peptidase C19 family, which includes ubiquitinyl hydrolases. This protein deubiquitinates target proteins such as p53 (a tumor suppressor protein) and WASH (essential for endosomal protein recycling), and regulates their activities by counteracting the opposing ubiquitin ligase activity of proteins such as HDM2 and TRIM27, involved in the respective process. Mutations in this gene have been implicated in a neurodevelopmental disorder. [provided by RefSeq, Mar 2016],                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Protein Expression       | Epithelium,Mammary cancer,Testis,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Subcellular Localization | nucleus,nucleoplasm,cytosol,nuclear body,PML body,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Protein Function         | catalytic activity:Ubiquitin C-terminal thioester + H(2)O = ubiquitin + a thiol.,enzyme regulation:Inhibited by N-ethyl-maleimide (NEM) and divalent cations. Tolerates high concentrations of NaCl but is inhibited at concentrations of 195 mM and higher.,function:Cleaves ubiquitin fusion protein substrates. Deubiquitinates TP53/p53 and MDM2 and strongly stabilizes TP53 even in the presence of excess MDM2, and also induces TP53-dependent cell growth repression and apoptosis.,PTM:Polyneddylated.,PTM:Polyubiquitinated.,similarity:Belongs to the peptidase C19 family.,similarity:Contains 1 MATH domain.,subcellular location:Present in a minority of ND10 nuclear bodies. Association with VMW110 at early times of infection leads to an increased proportion of USP7-containing ND10. Colocalizes with ATXN1 in the nucleus.,subunit:Monomer. Interacts with TP53, MDM2 and UBXN6. Interacts with herpesvirus 1 trans-acting transcriptional protein ICP0/VMW110 and Epstein-Barr virus EBNA1. EBNA1 shows a 10-fold higher affinity than TP53 and can compete with it for USP7 binding. Binding to VMW110 may modulate the substrate specificity or activity of USP7 to stabilize viral proteins. Interacts with ATXN1 and the strength of interaction is influenced by the length of the poly-Gln region in ATXN1. A weaker interaction seen with mutants having longer poly-Gln regions.,tissue specificity:Widely expressed., |
| Usage                    | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |