

# MMP13 Recombinant Polyclonal Antibody (3HCLC)

## Product Details

|                    |  |
|--------------------|--|
| Size               | 100 µg   |
| Species Reactivity | Human  |
| Host/Isotope       | Rabbit / IgG   |
| Class              | Recombinant Polyclonal   |
| Type               | Antibody   |
| Clone              | 3HCLC  |
| Conjugate          | Unconjugated   |
| Immunogen          | Recombinant protein corresponding to amino acids 221–471 of human MMP-13                     |
| Form               | Liquid   |
| Concentration      | 0.5 mg/mL  |
| Purification       | Protein A  |
| Storage buffer     | PBS  |
| Contains           | 0.09% sodium azide   |
| Storage Conditions | Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles. |
| RRID               | AB_2532680   |

| Applications                              | Tested | Dilution   | Published |
|---|--------|------------|-----------|
| Immunocytochemistry (ICC)                 | ✓      | 1 µg/mL    |           |
| Immunofluorescence (IF)                   | ✓      | 1 µg/mL    |           |
| Immunohistochemistry (Paraffin) (IHC (P)) | ✓      | 1:50-1:200 |           |
| Western Blot (WB)                         | ✓      | 1-3 µg/mL  |           |

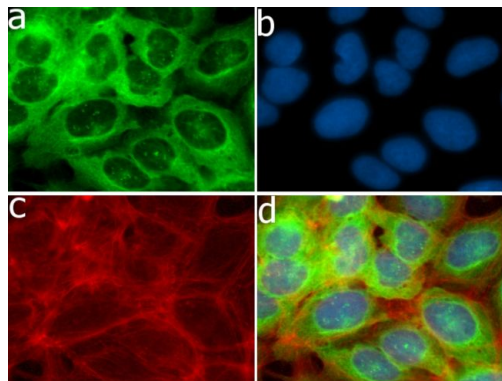
## Product Specific Information

This antibody is predicted to react with mouse, rat, non-human primate and rabbit based on sequence homology.

Intact IgG appears on a non-reducing gel as ~150 kDa band and upon reduction generating a ~25 kDa light chain band and a ~50 kDa heavy chain.

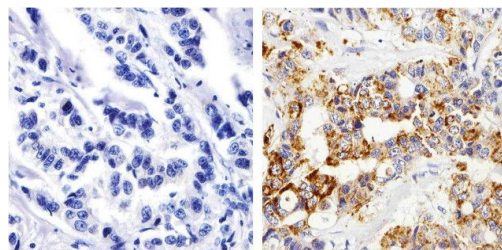
Recombinant rabbit polyclonal antibodies are unique offerings from Thermo Fisher Scientific. They are comprised of a selection of multiple different recombinant monoclonal antibodies, providing the best of both worlds – the sensitivity of polyclonal antibodies with the specificity of monoclonal antibodies - all delivered with the consistency only found in a recombinant antibody. While functionally the same as a polyclonal antibody – recognizing multiple epitope sites on the target and producing higher detection sensitivity for low abundance targets – a recombinant rabbit polyclonal antibody has a known mixture of light and heavy chains. The exact population can be produced in every lot, circumventing the biological variability typically associated with polyclonal antibody production.

## Product Images For MMP13 Recombinant Polyclonal Antibody (3HCLC)



### MMP13 Antibody (710311) in IF

Immunofluorescent analysis of MMP-13 in HeLa cells using a MMP-13 Recombinant Rabbit Polyclonal Antibody (Product # 710311) followed by detection using an Alexa Fluor 488-conjugated Goat anti-Rabbit secondary antibody (green) (Image A). Nuclei were stained using DAPI (Image B) and actin stained with Alexa Fluor 594 phalloidin (red) (image C). Image D is a composite image showing nuclear localization of MMP-13.

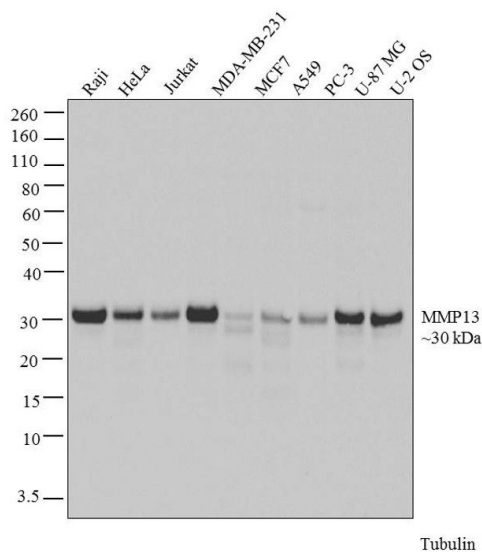


### MMP13 Antibody (710311) in IHC (P)

Immunohistochemistry analysis of MMP13 showing staining in the cytoplasm of paraffin-embedded human breast carcinoma (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with a MMP13 Recombinant Rabbit Polyclonal Antibody (Product # 710311) diluted in 3% BSA-PBS at a dilution of 1:100 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

### MMP13 Antibody (710311) in WB

Western blot analysis of MMP13 was performed by loading 20 µg of Raji (lane1), HeLa (lane2), Jurkat (lane3), MDA-MB-231 (lane4), MCF7 (lane5), A549 (lane6), PC-3 (lane7), U-87 MG (lane8) and U2OS (lane9) cell lysates using Novex®NuPAGE®4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock Electrophoresis System (Product # EI0002), Novex® Sharp Pre-Stained Protein Standard (Product # LC5800), and iBlot® Dry Blotting System (Product # IB21001). Proteins were transferred to a nitrocellulose membrane and blocked with 5 % skim milk 4°C overnight. MMP13 was detected at ~30 kDa using MMP13 Recombinant Rabbit Polyclonal Antibody (Product # 710311) at 1-3 µg/mL in 2.5 % skim milk for 3 hours at room temperature on a rocking platform. Goat anti-Rabbit IgG-HRP Secondary Antibody (Product # G21234) at 1:5000 dilution was used and chemiluminescent detection was performed using Pierce™ ECL Western blotting Substrate (Product # 32106).



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