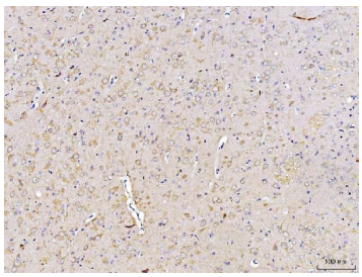
# DUSP6 Antibody (RQ6707)

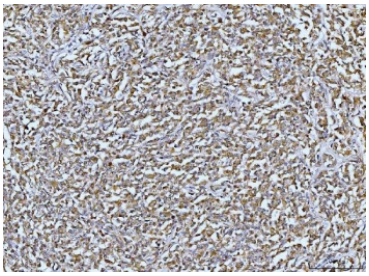
| Catalog No. | Formulation | Size |
|---|---|---|
| RQ6707 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

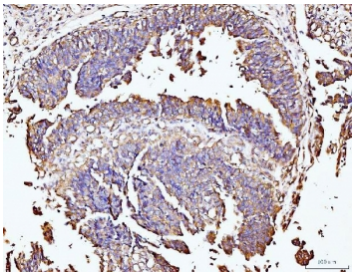
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Antigen affinity purified |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen affinity purified |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose |
| **UniProt** | Q16828 |
| **Applications** | Western Blot : 1-2ug/ml<br>Immunohistochemistry (FFPE) : 2-5ug/ml<br>Immunofluorescence (FFPE) : 5ug/ml<br>Flow Cytometry : 1-3ug/million cells<br>Direct ELISA : 0.1-0.5ug/ml |
| **Limitations** | This DUSP6 antibody is available for research use only. |



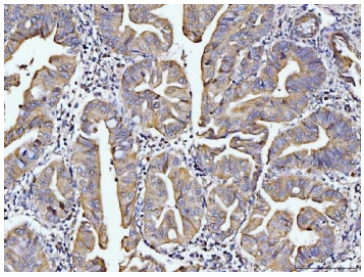
IHC staining of FFPE rat brain tissue with DUSP6 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



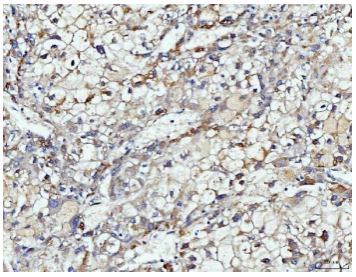
IHC staining of FFPE human lymphadenoma tissue with DUSP6 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



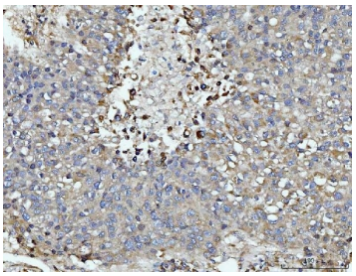
IHC staining of FFPE human colonic adenocarcinoma tissue with DUSP6 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



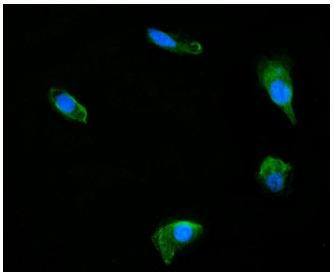
IHC staining of FFPE human rectal cancer tissue with DUSP6 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



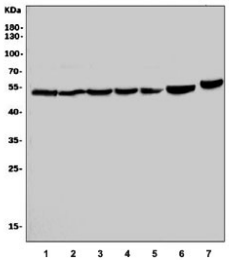
IHC staining of FFPE human liver cancer tissue with DUSP6 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



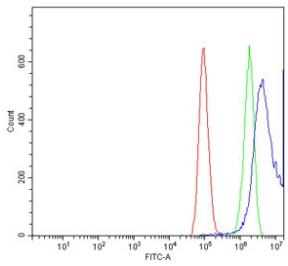
IHC staining of FFPE human liver cancer tissue with DUSP6 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human PC-3 cells with DUSP6 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.




Western blot testing of 1) human U-87 MG, 2) human RT4, 3) human PC-3, 4) human HL60, 5) human HepG2, 6) rat brain and 7) mouse brain tissue lysate with DUSP6 antibody. Predicted molecular weight 42/26 kDa (isoform 1/2).




Flow cytometry testing of human HepG2 cells with DUSP6 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= DUSP6 antibody.

## Description

Dual specificity phosphatase 6 (DUSP6) is an enzyme that in humans is encoded by the DUSP6 gene. The protein encoded by this gene is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product inactivates ERK2, is expressed in a variety of tissues with the highest levels in heart and pancreas, and unlike most other members of this family, is localized in the cytoplasm. Mutations in this gene have been associated with congenital hypogonadotropic hypogonadism. Alternatively spliced transcript variants have been found for this gene.

## Application Notes

Optimal dilution of the DUSP6 antibody should be determined by the researcher.

## Immunogen

Recombinant human protein (amino acids M1-T381) was used as the immunogen for the DUSP6 antibody.

## Storage

After reconstitution, the DUSP6 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.