

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                       |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human p62/SQSTM1 in direct ELISAs.                                                  |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Rabbit IgG Clone # 2533B                                                         |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from cell culture supernatant                                       |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human p62/SQSTM1<br>Asp368-Leu440<br>Accession # Q13501 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm             |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                             |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Knockout Validated</b>   | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b>  | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunoprecipitation</b>  | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

SQSTM1 (Sequestrome-1), also called p62, is a widely expressed, stress-inducible, multifunctional 62 kDa intracellular protein. The 440 amino acid (aa) human SQSTM1 contains multiple adaptor domains that allow interaction with proteins in NGF/NFκB and other signaling pathways (notably TRAF6, atypical protein kinase C family and Src family), polyubiquitin, proteasome subunits and many others. It contains numerous regulatory phosphorylation sites and a dimerization site. SQSTM1 shuttles ubiquitinated proteins to the proteasome and is important in autophagy and apoptosis. Its dysregulation is associated with Paget's disease of bone, Parkinson's and Alzheimer's diseases, and cancers. Within aa 344-440, which includes the ubiquitin-binding domain, human SQSTM1 shares 100% aa sequence identity with mouse and rat SQSTM1.

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