

#### DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat full length and mitochondria-processed HTRA2/Omi.
<b>Source</b>	Polyclonal Rabbit IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human HTRA2/Omi Ala134-Glu458 Accession # O43464
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunocytochemistry</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

HtrA2/Omi is the mammalian homologue of bacterial high temperature requirement protein (HtrA). HtrA2/Omi localizes to the mitochondria and is processed to expose an amino-terminal Reaper-like motif similar to SMAC/Diablo. HtrA2/Omi is released from the mitochondria in response to apoptotic insult and can interact with the BIR2 or BIR3 domains of XIAP to relieve caspase-IAP inhibition. This effect can be measured by reversing XIAP-BIR2 (R&D Systems, Catalog # 786-XB) inhibition of Caspase-7 (R&D Systems, Catalog # 823-C7) cleavage of a fluorogenic peptide (DEVD-AFC, MP Bio, Catalog # AFC-138). IC<sub>50</sub> values for this effect are typically between 0.2 and 1.5 µM. HtrA2/Omi is trimeric and functions as a serine protease. The serine protease activity may play a more central role in apoptosis than its IAP antagonizing function. A PDZ domain regulates the serine protease activity by blocking access to the active site. The specificity of the protease is yet to be defined and no endogenous substrates are known to date.

#### PRODUCT SPECIFIC NOTICES

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