anti-p62 / SQSTM1 (C-terminus) guinea pig polyclonal, serum

Cat. No. GP62-C
Quantity 100 µL

Product description

Host guinea pig
Antibody Type polyclonal
Immunogen C-terminal domain (20 amino acids: C-NYD IGA ALD TIQ YSK HPP PL) of human p62 protein, coupled to KLH. This peptide sequence is identical in human, monkey, bovine, mouse, and rat.
Purification stabilized antiserum
Conjugate unconjugated
Formulation contains 0.09% sodium azide
Storage short term at 2 – 8 °C; long term storage in aliquots at - 20 °C; avoid freeze/ thaw cycles
Tested species reactivity human, mouse, rat
Note centrifuge prior to opening
Intended use Research use only

Applications

Tested applications Tested dilutions
Immunohistochemistry (IHC) - frozen 1:100 – 1:600
Immunohistochemistry (IHC) - paraffin 1:100 – 1:600 (microwave treatment recommended)
Western Blot (WB) 1:1,000 – 1:2,000

Background

Human 62 kD (p62) protein, is present in intracytoplasmic inclusions (e.g. hyaline bodies) of hepatocellular carcinoma. p62 protein (also described as ubiquitin-binding protein; sequestosome 1; SQSTM1) has been found in many tissues and cells, including lymphoid cells, serving probably a common cellular signal transduction mechanism (e.g. ubiquitin-associated degradation and autophagy). The antiserum stains also neurofibrillary tangles in the brain of patients suffering from Alzheimer's disease.

Positive western blot control lysate available:
PLC western blot control, Cat. No. 64002
PLC western blot control, large, Cat. No. 64002L
<table>
<thead>
<tr>
<th>Reference</th>
<th>Species</th>
<th>Application</th>
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</thead>
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<tr>
<td>Matta, S. et al. NADPH Oxidase and Guanylate Binding Protein 5 Restrict Survival of Avirulent Type III Strains of Toxoplasma gondii in Naive Macrophages. MBio. 9, (2018).</td>
<td>mouse</td>
<td>ICC-IF</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Organism</th>
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<tr>
<td>Taneike, M. et al.</td>
<td>mTOR Hyperactivation by Ablation of Tuberous Sclerosis Complex 2 in the Mouse Heart Induces Cardiac Dysfunction with the Increased Number of Small Mitochondria Mediated through the Down-Regulation of Autophagy. PLoS One 11, (2016).</td>
<td>mouse</td>
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<td>Reference</td>
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<tr>
<td>Tanaka, K. et al.</td>
<td>A Novel Acylaminoimidazole Derivative, WN1316, Alleviates Disease Progression via Suppression of Glial Inflammation in ALS Mouse Model.</td>
<td>mouse</td>
<td>WB</td>
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<tr>
<td>Heijnen, H. F. et al.</td>
<td>Ribosomal Protein Mutations Induce Autophagy through S6 Kinase Inhibition of the Insulin Pathway.</td>
<td>human</td>
<td>WB, ICC-IF</td>
</tr>
<tr>
<td>Ost, M., Werner, F., Dokas, J., Klaus, S. &amp; Voigt, A.</td>
<td>Activation of AMPKa2 Is Not Crucial for Mitochondrial Uncoupling-Induced Metabolic Effects but Required to Maintain Skeletal Muscle Integrity.</td>
<td>mouse</td>
<td>WB</td>
</tr>
<tr>
<td>Zatlovkal, B. et al.</td>
<td>Sensitivity and specificity of in situ proximity ligation for protein interaction analysis in a model of steatohepatitis with mallory-denk bodies.</td>
<td>mouse</td>
<td>IHC (frozen)</td>
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<tr>
<td>Sarkar, C. et al.</td>
<td>Impaired autophagy flux is associated with neuronal cell death after traumatic brain injury.</td>
<td>mouse</td>
<td>IHC (frozen)</td>
</tr>
<tr>
<td>Gabandé-Rodrıuez, E., Boya, P., Labrador, V., Dotti, C. &amp; Ledesma, M.</td>
<td>High sphingomyelin levels induce lysosomal damage and autophagy dysfunction in Niemann Pick disease type A.</td>
<td>mouse</td>
<td>WB</td>
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<tr>
<td>Xu, X. et al.</td>
<td>Autophagy is essential for effector CD8 T cell survival and memory formation.</td>
<td>mouse</td>
<td>WB</td>
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<td>Furuya, N. et al.</td>
<td>PARK2/Parkin-mediated mitochondrial clearance contributes to proteasome activation during slow-twitch muscle atrophy via NFE2L1 nuclear translocation.</td>
<td>mouse</td>
<td>WB</td>
</tr>
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<td>Zhang, L. et al.</td>
<td>HACE1-dependent protein degradation provides cardiac protection in response to haemodynamic stress.</td>
<td>mouse</td>
<td>WB, IHC (paraffin), ICC-IF, IP</td>
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<td>Yamanaka, T. et al.</td>
<td>NF-Y inactivation causes atypical neurodegeneration characterized by ubiquitin and p62 accumulation and endoplasmic reticulum disorganization.</td>
<td>mouse</td>
<td>WB, IHC (frozen), IEM</td>
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<td>Kageyama, S. et al.</td>
<td>Proteasome Dysfunction Activates Autophagy and the Keap1-Nrf2 Pathway.</td>
<td>mouse</td>
<td>WB, IHC (frozen)</td>
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<td>Yamano, K. &amp; Youle, R. J.</td>
<td>PINK1 is degraded through the N-end rule pathway.</td>
<td>human</td>
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<td>Yuan, H.-X., Russell, R. C. &amp; Guan, K.-L.</td>
<td>Regulation of PIK3C3/VPS34 complexes by MTOR in nutrient stress-induced autophagy.</td>
<td>human, mouse</td>
<td>WB</td>
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<td>Jiang, S., Guo, R., Zhang, Y., Zou, Y. &amp; Ren, J.</td>
<td>Heavy metal scavenger metallothionein mitigates deep hyperthermia-induced myocardial contractile anomalies: role of autophagy.</td>
<td>mouse</td>
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<td>Shackelford, D. B. et al.</td>
<td>LKB1 inactivation dictates therapeutic response of non-small cell lung cancer to the metabolism drug phenformin.</td>
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Product Images