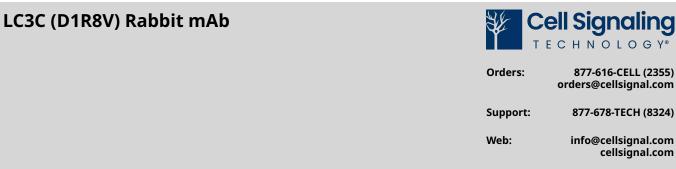
Store at -20C

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 14	<b>Source/Isotype:</b> Rabbit IgG	UniProt ID: #Q9BXW4	<b>Entrez-Gene Id:</b> 440738	
Product Usage Information		Application Western Blotting		Dilution 1:1000			
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. <i>Do not aliquot the antibody.</i>					
Specificity/Sensitivity		LC3C (D1R8V) Rabbit mAb recognizes endogenous levels of total LC3C protein. This antibody does not cross react with other LC3 isoforms.					
Source / Purification		Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu50 of human LC3C protein.					
Background Background References		<ul> <li>Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of bulk cytoplasmic contents (1,2). Autophagy is generally activated by conditions of nutrient deprivation, but it has also been associated with a number of physiological processes including development, differentiation, neurodegenerative diseases, infection, and cancer (3). Autophagy marker Light Chain 3 (LC3) was originally identified as a subunit of microtubule-associated proteins 1A and 1B (termed MAP1LC3) (4) and subsequently found to contain similarity to the yeast protein Apg8/Aut7/Cvt5 critical for autophagy (5). Three human LC3 isoforms (LC3A, LC3B, and LC3C) undergo posttranslational modifications during autophagy (6-9). Cleavage of LC3 at the carboxy terminus immediately following synthesis yields the cytosolic LC3-I form. During autophagy, LC3-I is converted to LC3-II through lipidation by a ubiquitin-like system involving Atg7 and Atg3 that allows for LC3 to become associated with autophagic vesicles (6-10). The presence of LC3 in autophagosomes and the conversion of LC3 to the lower migrating form, LC3-II, have been used as indicators of autophagy (11).</li> <li>In general, expression of LC3C protein is lower than the other LC3 isoforms, with the highest LC3C expression observed in placenta, lung, and ovary (7).</li> <li>Reggiori, F. and Klionsky, D.J. (2005) <i>Cell Death Differ.</i> 12 Suppl 2, 1509-18.</li> <li>Levine, B. and Yuan, J. (2005) <i>J. Clin. Invest.</i> 115, 2679-88.</li> <li>Mann, S.S. and Hammarback, J.A. (1994) <i>J. Biol. Chem.</i> 269, 11492-97.</li> <li>Lang, T. et al. (2006) <i>BioBO J.</i> 19, 5720-28.</li> <li>He, H. et al. (2003) <i>J. Biol. Chem.</i> 279, 47704-10.</li> <li>Wu, J. et al. (2006) <i>Biochem. Biophys. Res. Commun.</i> 339, 437-42.</li> <li>Ichimura, Y. et al. (2004) <i>J. Biol. Chem.</i> 279, 47704-10.</li> <li>Wu, J. et al. (2006) <i>J. Clin.</i> 17, 2805-12.</li> </ul>					
Species Reacti	vity	Species reactivity is de	etermined by testin	g in at least one approve	ed application (e.g.,	western blot).	
Western Blot Buffer		IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.					
Applications Key		W: Western Blotting					
Cross-Reactivity Key		H: Human					
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