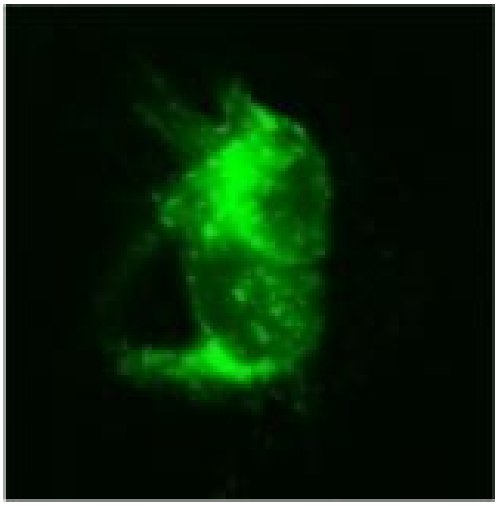
ABGENT: A Leader of the market in Autophagy

150 antibodies and peptides including almost all targets of autophagy

- Provide peptide induced autophagy
- Over 50 autophagy phospho-specific antibodies
- More than 100 antibodies about mTOR path
- Publish the reviews of pathway together with autophagy experts

AutoDOT

The new autophagy visualization dye!



- Superior to traditional monodansyl cadaverine staining
- Specific Staining of Autophagic Vacuoles
- Faster Penetration
- Higher Sensitivity/Greater Signal Endurance on Stored Slides
- Greater Resistance to Acid

Phosphorylation of Autophagy pathway

Paper published for Phosphorylation of Autophagy pathway:
"Regulation of the autophagy protein LC3 by phosphorylation"
Journal of JCB, 2010, volume 190, No.4:533-539
In this paper, we identified a new phosphorylation site on LC3 that reduces its recruitment and participation in autophagy. The result implicate LC3 phosphorylation as a novel switch that modulates its biological function in mammalian cells.
Our observations support the concept of a reserve pool of phosphorylated LC3 that can be rapidly recruited for autophagy in response to external stimuli such as nutrient deprivation or mitochondrial injury.

AutoDOT Example Staining Protocol

1. Grow cells overnight to approximately 70% confluency.
2. Induce autophagy in the test sample (protocol was tested using starvation-induced autophagy, but is expected to work with other forms of induction). Preserve a control sample where autophagy is not induced.
3. Prepare the staining solution by diluting stock AutoDOT 1:1000 in PBS.
4. Aspirate the media from the test and control cells and cover them in staining solution.
5. Incubate at 33 degrees C for 15 minutes.
6. Fix with 4% formaldehyde for 20 minutes.
7. Wash with PBS 3 times, 10 minutes each.
8. Immediately analyze and compare test and control samples by fluorescence microscopy using an inverted microscope equipped with a filter system (excitation filter: 380-420 nm, barrier filter: 450 nm).

For further protocols, consult J. Histochemistry & Cytochemistry 49(2): 177–185, 2001.
AutoDOT is the trademarked name for the dye referred to as MDH in this citation.

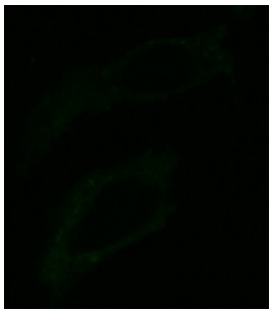
AutoDOT– The AutophagyVisualization Solution

Superior to traditional monodansyl cadaverine staining

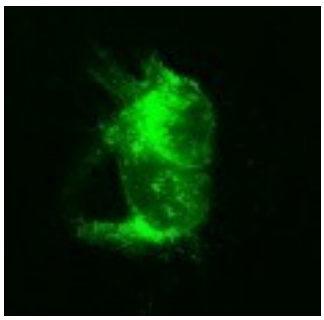
- √ Specific Staining of AutophagicVacuoles
- √ Faster Penetration
- √ Higher Sensitivity
- √ Greater Signal Endurance on Stored Slides
- √ Greater Resistance to Acid
- √ Online Protocol

AutoDOT Staining in Mouse Cerebellar Cells

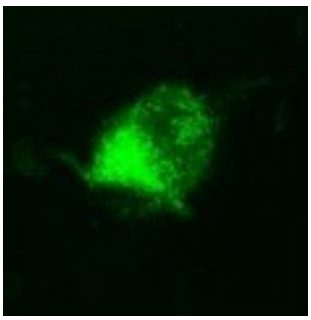
Untreated



Same Day Induced Starvation



Stored Slides
2 weeks Post-induction



Citations: J. Histochemistry& Cytochemistry49(2): 177–185, 2001;
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Cat No.	Concentration	Volume	Price
SM1000a	0.1M	50uL	$50
SM1000b	0.1M	200 uL	$150