## ADVANCED TARGETING SYSTEMS

# Antibody to Melanopsin, AB-N38 Antibody to Melanopsin, affinity-purified, AB-N39 

This is an example protocol. Please follow good laboratory technique and safety guidelines. Working dilutions must be determined for each lot.<br>Please contact us if you have questions. www.ATSbio.com

## IMMUNOSTAINING PROTOCOL

1. Remove the corneas, and postfix eyes at $4^{\circ} \mathrm{C}$ for 24 hours in $4 \%$ paraformaldehyde in phosphatebuffered saline (PBS). Remove lenses.
2. Cryoprotect eyecups for sectioning at $4^{\circ} \mathrm{C}$ for 24 hours in $30 \%$ sucrose in PBS; embed the eyecups in OCT medium (Sakura Finetek, Torrance, CA), freeze, section (16-20 $\mu \mathrm{m}$ ), and thaw-mount onto gelatin-coated slides.
3. Dissect retinas destined for flat-mounting from eyecups immediately after postfixation, stretch onto filter paper, and process in 1.5 ml microfuge tubes.
4. Wash tissue (slides and flat-mounts) 3 times ( $10 \mathrm{~min}, 4^{\circ} \mathrm{C}$ ) in Tris- buffered saline (TBS, Quality Biological, Gaithersburg, MD) and block for 30 min at $4^{\circ} \mathrm{C}$ in $1.5 \%$ normal goat serum in TBS.
5. Incubate tissue for 24 hr at $4^{\circ} \mathrm{C}$ in a $1: 2,500$ dilution of antiserum UF006 in a TBS-incubating buffer containing $1 \%$ bovine serum albumin, $0.25 \%$ carrageenan lambda and $0.003 \%$ Triton X-100.
6. Wash slides and flat mounts three times in TBS $\left(10 \mathrm{~min}, 4^{\circ} \mathrm{C}\right)$ and incubate for 1 hour at $22^{\circ} \mathrm{C}$ in Cy3-conjugated anti-rabbit IgG antibody (Jackson ImmunoResearch Laboratories, West Grove, PA) diluted 1:500 in TBS incubating buffer.
7. Wash 3 final times in TBS $\left(10 \mathrm{~min}, 22^{\circ} \mathrm{C}\right)$.
8. Remove flat-mounts from the filter paper and transfer onto glass microscope slides. Mount flatmounts and sections in DAPI-containing Vectashield (Vector Laboratories, Burlingame, CA), coverslip, and seal with clear fingernail polish.

Panda S. et al. 2002. Melanopsin (Opn4) requirement for normal light- induced circadian phase shifting Science 298(5601):2213-2216.

