



## **Black-Gold II Myelin Ready-to-Dilute Staining Kit with Toluidine Blue O Counter Stain for identifying Normal & Pathogenic Myelin**

**Catalogue No.:** TR-100-BG

**Description:** Black-Gold® II is a novel haloaurophosphate complex which localises myelin within the central nervous system. The Black Gold II Ready-to-Dilute (RTD™) Staining Kit allows you to localise myelin, both individual fibres and tracts, along with the option of co-localising cell bodies via the Toluidine Blue counter stain. Black Gold II labelled myelinated fibres appear nearly black while the Toluidine Blue O labelled cellular Nissl bodies are blue under bright field illumination.

Black Gold II can demonstrate and characterise specific myelin changes associated with exposure to diverse neurotoxicants including kainic acid, domoic acid, 3-nitropropionic acid, Fluoro-Gold and isoniazid. Black Gold II can also be combined with other histochemical markers including Nissl stains, retrogradely transported fluorescent tracers and fluorescent markers of neuronal degeneration. The advantages associated with the Black-Gold II include high resolution, high contrast, short histochemical processing time, versatility and consistent reproducibility.

**Other Names:** black and gold

**Applications:** Black Gold II is a high resolution myelin stain with amyloid plaque counter stain. Its use is tailored to studies using formalin or paraformaldehyde fixed, non-paraffin embedded, non-solvent processed brain tissue. It can be used with both thick and thin sections. For thick sections, gelatin coated slides or slides specially designed to bind tissues sections should be used to avoid section loss. Free-floating sections can be used as well but sections are easier to handle and transfer when mounted on slides.

A suggested method for thick sections is provided as a guide: Either frozen or vibratome sections are cut at a thickness of 20-50 µm and collected in 0.1 M neutral phosphate buffer. The sections are then typically mounted on 1% gel-coated slides and then air dried on a slide warmer (at 50 degrees C) for at least an hour until thoroughly dried and adhered to the slide. The sections can be stained loose, although the sections are easier to handle when mounted on slides. The mounted sections were rehydrated in distilled water for 2 minutes before being processed in the staining solutions.

**Form:** The reagents in the Black Gold kit are all supplied in a liquid format and are ready-to-dilute.

**Storage:** The kit can be transported at room temperature. Once received, the kit can be stored for up to 12 months at 4°C protected from light. Diluted solutions can be stored up to one month at 4°C protected from light.

**Specific References:** Ying YL et al. (2014) Adult neural precursor cells from the subventricular zone contribute significantly to oligodendrocyte regeneration and remyelination. *J Neurosci.* 2014 Oct 15;34(42):14128-46

**Kit Components:** Black-Gold II (Dilute 1:10 prior to use) - 10 mL

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FOR RESEARCH USE ONLY



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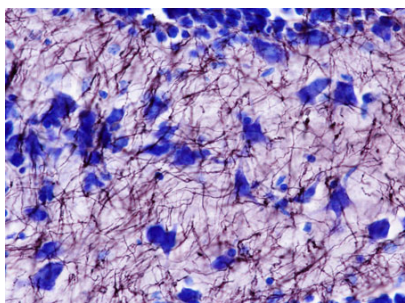
Sodium Thiosulfate, fixative (Dilute 1:10 prior to use) - 10 mL

Toluidine Blue O (Dilute 1:10 prior to use) - 10 mL

Acetic Acid (Dilute 1:10 prior to use) - 10 mL

**Reagent Kit protocol:** Please refer to our online product listing for current protocol/MSDS versions.

**MSDS:** Please refer to our online product listing for current protocol/MSDS versions.



Bright field illumination (60X mag) of the dentate gyrus of a normal mouse reveals individual Black-Gold II stained myelinated fibres and Toluidine Blue O stained polymorph cells (centre) and granule cells (top). Photo is courtesy of Dr. Larry Schmued.

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