



STAINS & DYES

STAIN NAME	USE	RESULTS
Hematoxylin & eosin (H&E)	General	Nuclei - Blue, everything else 3 shades of Pink
May grunwald Giemsa	General	Nuclei - Blue, Cytoplasm & connective tissue - Pink, Erythrocytes – Salmon
Acid fast bacilli (AFB)(Zeil-Neelson's)	Bacteria	Bacilli - Red, Nuclei - Blue
Alcian blue pH 1.0 & 2.5	Glycosaminoglycans	Glycosaminoglycans - Blue, background - Reddish Pink
Alizarin Red S	Calcium	Calcium - dark Orange, everything else dark
Benhold's Congo red	Amyloid	Amyloid - Pinkish Red, nuclei - Blue
Bielschowsky	SENILE PLAQUES	Neurofibrils and senile plaques- Black, Background - Yellow to Brown
Brown & Hopps Gram	Gram bacteria	Gram positive bacteria - Blue, Gram negative bacteria - Red
Crystal Violet for Amyloid	Amyloid	Amyloid, mucin, renal hyaline - Red Purple, Background - Blue
Field's Stain malaria and HP	Bacteria & malaria	Helicobacter - Blue, malaria - Red
Fite's for acid fast organisms	Bacteria	Bacteria - Red, everything else - Blue
Fontana Masson	Melanin & Argentaffin	Melanin & Argentaffin - Black, background - Pink
Gomori's Periodic Acid-Methanamine Silver	Basement membrane	Basement membrane - Black, background - light Green
Gomori's One-step Trichrome	Collagen & Muscle	Collagen - Green, Muscle - Red, nuclei - Black
Grocott's Methanamine Silver	Fungus	Fungus - Black, background - light Green
Hall's for Bilirubin	Bile, Bilirubin	Bilirubin - Yellow green, Collagen and muscle - Red
Luxol Fast Blue - Crystal ect Violet	Myelin, Nissl	Myelin- Blue, Nissl substance - Purple
Luxol Fast Blue - H&E	Myelin, Nuclei & background	Myelin - Blue, nuclei - Purple, background - Pink
Luxol Fast Blue - PAS	Myelin, Glycogen	Myelin - Blue, Glycogen - Pink
Luxol Fast Blue - NFR	Myelin, background	Myelin - Blue, Background - Red
Masson's Trichrome	Collagen & Muscle	Collagen - Blue, Muscle - Red, Nuclei - Black
Mallory's PTAH	Muscle Striations	Muscle Striations - Purple



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Malloy's Trichrome	Spawning	Nuclei - dark Red, erythrocytes - Orange, collagen fibres, cartilage matrix and mucus - Blue
Mayer's Mucicarmine	Fungus & Mucin	Mucin and fungus - Pink, nuclei - Black, everything else - Yellow
Melanin Bleach	Melanin	This stain removes melanin pigment for normal H&E staining to be visible.
Mowry's	Colloidal iron	Colloidal Iron - Blue, Background - Red
Movat's Pentachrome	Collagen, fibrin, Mucin	Nuclei & Elastic fibers – Black, Collagen and reticular fibers – Yellow, Ground substance, mucin – Blue to green, Fibrinoid, fibrin – Intense Red, Muscle - Red
Oil Red O	Lipids (Frozens Only)	Lipids - Red, Background - Blue
Orcein for hepatitis	Virus	Hepatitis virus - Dark red
Periodic Acid Schiff (PAS)	Fungus & Glycogen	Fungus - Pink, background light Green & Glycogen - Pink, background Bue
Periodic Acid Schiff with digestion (PASD)	Glycogen	Glycogen - Pink, background - light Bue or Purple
Perls Prussian Blue	Ferric Iron	Ferric Iron - Blue, Background - Pink
Picrosirius Red	Collagen	Collagen - Red, Background - Yellow
Safranin O Fast Green	Articular Cartilage	Articular Cartilage - Red, Nuclei - Blue, Background - Green or Pink
Sirius Red Fast Green	Collagen	Collagen - Red, Background - Green
Snook's Reticulin	Reticulin	Reticulin - Black, Background - Pink
Steiner Spirochetes	Spirochetes	Spirochetes - Black, Background - Yellow
Johnson's Toluidine Blue	Mast cell	Metachromatic tissue (mast cells)- Purple, Background - Blue
Van Gieson	Collagen	Collagen - red, Nuclei - Black, Background - Yellow
Verhoeff Van Gieson	Elastic Fibers	Elastic fibers - Black, background - Pink
Von Kossa	Calcium	Calcium - Black, Background - Pink