

6.1.3.7. Alum–nuclear fast red

Staining solution (after Luna, 1968; Humason, 1979; Presnell and Schreibman, 1997)

Nuclear fast red (Kernechtrot; C.I. 60760):	0.2 g
Aluminium sulphate ($\text{Al}_2(\text{SO}_4)_3 \cdot 18\text{H}_2\text{O}$):	10 g
Water:	200 ml

Heat with stirring until it is nearly boiling, then leave overnight to cool. There is a substantial residue of insoluble material, which must be removed by decanting and filtering. Keeps for about a year; may need to be filtered before each use.

Procedure

- (1) Stain hydrated sections for 5–10 min.
- (2) Wash in running tap water, about 1 min.
- (3) Dehydrate, clear and cover.

Result

Nuclei crimson. Usually there is also pale pink staining of cytoplasm and collagen. If staining is unsatisfactory, the cause may be a mislabelled or otherwise unsatisfactory batch of the dye (see Frank *et al.*, 2007).