Supplementary File 1

The list of features used in the random trees-based classification.

Nucleus: Area

Nucleus: Perimeter

Nucleus: Circularity

Nucleus: Max caliper

Nucleus: Min caliper

Nucleus: Eccentricity

Nucleus: Hematoxylin OD mean

Nucleus: Hematoxylin OD sum

Nucleus: Hematoxylin OD std dev

Nucleus: Hematoxylin OD max

Nucleus: Hematoxylin OD min

Nucleus: Hematoxylin OD range

Nucleus: DAB OD mean

Nucleus: DAB OD sum

Nucleus: DAB OD std dev

Nucleus: DAB OD max

Nucleus: DAB OD min

Nucleus: DAB OD range

Cell: Area

Cell: Perimeter

Cell: Circularity

Cell: Max caliper

Cell: Min caliper

Cell: Eccentricity

Cell: DAB OD mean

Cell: DAB OD std dev

Cell: DAB OD max

Cell: DAB OD min

Cytoplasm: DAB OD mean

Cytoplasm: DAB OD std dev

Cytoplasm: DAB OD max

Cytoplasm: DAB OD min

Nucleus/Cell area ratio

Smoothed: 25 µm: Nucleus: Area

Smoothed: 25 µm: Nucleus: Perimeter

Smoothed: 25 µm: Nucleus: Circularity

Smoothed: 25 µm: Nucleus: Max caliper

Smoothed: 25 µm: Nucleus: Min caliper

Smoothed: 25 µm: Nucleus: Eccentricity

Smoothed: 25 µm: Nucleus: Hematoxylin OD mean

Smoothed: 25 µm: Nucleus: Hematoxylin OD sum

Smoothed: 25 µm: Nucleus: Hematoxylin OD std dev

Smoothed: 25 µm: Nucleus: Hematoxylin OD max

Smoothed: 25 µm: Nucleus: Hematoxylin OD min

Smoothed: 25 µm: Nucleus: Hematoxylin OD range

Smoothed: 25 µm: Nucleus: DAB OD mean

Smoothed: 25 µm: Nucleus: DAB OD sum

Smoothed: 25 µm: Nucleus: DAB OD std dev

Smoothed: 25 µm: Nucleus: DAB OD max

Smoothed: 25 µm: Nucleus: DAB OD min

Smoothed: 25 µm: Nucleus: DAB OD range

Smoothed: 25 µm: Cell: Area

Smoothed: 25 µm: Cell: Perimeter

Smoothed: 25 µm: Cell: Circularity

Smoothed: 25 µm: Cell: Max caliper

Smoothed: 25 µm: Cell: Min caliper

Smoothed: 25 µm: Cell: Eccentricity

Smoothed: 25 µm: Cell: DAB OD mean

Smoothed: 25 µm: Cell: DAB OD std dev

Smoothed: 25 µm: Cell: DAB OD max

Smoothed: 25 µm: Cell: DAB OD min

Smoothed: 25 µm: Cytoplasm: DAB OD mean

Smoothed: 25 µm: Cytoplasm: DAB OD std dev

Smoothed: 25 µm: Cytoplasm: DAB OD max

Smoothed: 25 µm: Cytoplasm: DAB OD min

Smoothed: 25 µm: Nucleus/Cell area ratio

Smoothed: 25 µm: Nearby detection counts

Smoothed: 50 µm: Nucleus: Area

Smoothed: 50 µm: Nucleus: Perimeter

Smoothed: 50 µm: Nucleus: Circularity

Smoothed: 50 µm: Nucleus: Max caliper

Smoothed: 50 µm: Nucleus: Min caliper

Smoothed: 50 µm: Nucleus: Eccentricity

Smoothed: 50 µm: Nucleus: Hematoxylin OD mean

Smoothed: 50 µm: Nucleus: Hematoxylin OD sum

Smoothed: 50 µm: Nucleus: Hematoxylin OD std dev

Smoothed: 50 µm: Nucleus: Hematoxylin OD max

Smoothed: 50 µm: Nucleus: Hematoxylin OD min

Smoothed: 50 µm: Nucleus: Hematoxylin OD range

Smoothed: 50 µm: Nucleus: DAB OD mean

Smoothed: 50 µm: Nucleus: DAB OD sum

Smoothed: 50 µm: Nucleus: DAB OD std dev

Smoothed: 50 µm: Nucleus: DAB OD max

Smoothed: 50 µm: Nucleus: DAB OD min

Smoothed: 50 µm: Nucleus: DAB OD range

Smoothed: 50 µm: Cell: Area

Smoothed: 50 µm: Cell: Perimeter

Smoothed: 50 µm: Cell: Circularity

Smoothed: 50 µm: Cell: Max caliper

Smoothed: 50 µm: Cell: Min caliper

Smoothed: 50 µm: Cell: Eccentricity

Smoothed: 50 µm: Cell: DAB OD mean

Smoothed: 50 µm: Cell: DAB OD std dev

Smoothed: 50 µm: Cell: DAB OD max

Smoothed: 50 µm: Cell: DAB OD min

Smoothed: 50 µm: Cytoplasm: DAB OD mean

Smoothed: 50 µm: Cytoplasm: DAB OD std dev

Smoothed: 50 µm: Cytoplasm: DAB OD max

Smoothed: 50 µm: Cytoplasm: DAB OD min

Smoothed: 50 µm: Nucleus/Cell area ratio

Smoothed: 50 µm: Nearby detection counts