

hydrochloric acid. It is altered but not dissolved by acids and alkalies, which liberate the iron from it. The alkali acts much more slowly in removing the iron from this substance than from the Nissl granules.

The three nuclein compounds of the adult nerve cell are derived from the mitotic chromatin of the primitive nerve cell. It follows from this that the Nissl granules are constituted of chromatin that has diffused from the nucleus into the cytoplasm.

A substance analogous to that of the Nissl granules is found in the nerve cells of most animals, but not in all, as it is rarely present in the nerve cells of the Urodela. Those animals, whose nerve cells are devoid of this material, have chromatin in the nuclei of such cells similar to that found in the nuclei of the cells of other tissues.

The Nissl granules are morphological elements of the cell, and consist of one substance. They have the same refractive index as the cytoplasm during life, and are not found in the axis cylinder process.

All the results obtained go to support the view that all iron-holding nuclein compounds are derived from pre-existing ones, and in mitosis all the iron-holding substance of the cell is confined to the nuclear chromatin.