



3050 Spruce Street  
Saint Louis, Missouri 63103 USA  
Telephone 800-325-5832 • (314) 771-5765  
Fax (314) 286-7828  
email: techserv@sial.com  
sigma-aldrich.com

## Product Information

### Murexide

Product Number **M 2628**  
Store at Room Temperature

#### Product Description

Molecular Formula:  $C_8H_8N_6O_6$

Molecular Weight: 284.2

CAS Number: 3051-09-0

$\lambda_{max}$ : 525 nm

Extinction coefficient:  $E^{1\%1cm} = 12.1$

Synonyms: ammonium purpurate,  
5,5'-nitridodibarbituric acid ammonium salt

Murexide is a member of the barbiturate class of compounds. First reported in the 18th century, it can be formed through the successive treatment of uric acid with nitric acid and then ammonia.<sup>1,2</sup> Murexide is used as a dye in tissue staining procedures, an indicator in complexometric titrations<sup>3</sup>, and a metallochromic chelator of such free metal ions as calcium<sup>4</sup>, zinc,<sup>5</sup> and nickel.<sup>6</sup>

Calcium binding to bile salts<sup>4</sup> and to lithocholic acid derivatives<sup>7</sup> using murexide has been investigated. The binding of murexides to calcium-sequestering cellular organelles has been studied.<sup>8</sup> An automated protocol for the staining of bone and cartilage using murexide has been published.<sup>9</sup>

#### Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

#### Preparation Instructions

This product is soluble in 1 M NaOH (5 mg/ml), yielding a dark, purple solution.

#### References

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