

1155 East 57th Street  
Chicago 37, Illinois  
December 14, 1950

Dr. George Brown  
Memorial Hospital  
New York City, New York

Dear Dr. Brown:

Lehninger suggested that I write you to find out whether you could let us have a small quantity of 2-6 diamino purine and of 8 azo guanine.

We have developed a method for measuring the mutation rate of bacteria when grown in the presence of certain compounds and are engaged in a systematic investigation of the mutagenic effect of purine derivatives. We need for each experiment about one gram of the compound and would like, therefore, to have about five to ten grams on hand of each compound which we investigate. If your stock does not permit letting us have such quantities, perhaps you would be good enough to let us know where we could obtain the compound.

I am enclosing a manuscript of a paper which will appear in the December issue of the Proceedings of the National Academy of Science and which will show you the method which we are using.

Sincerely yours,



# THE SLOAN-KETTERING INSTITUTE FOR CANCER RESEARCH

RESEARCH DIVISION OF MEMORIAL CANCER CENTER

444 EAST 68TH STREET

NEW YORK 21, NEW YORK

December 19, 1950

Dr. Leo Szilard  
The University of Chicago  
Institute of Radiobiology and Biophysics  
Chicago 37, Illinois


Dear Doctor Szilard:

Unfortunately the quantities of 2,6-diaminopurine and of 8-azaguanine which you need are far above our supplies. I am sure that if you will write Dr. George Hitchings, Wellcome Research Institute, Tuckahoe 7, New York, he will supply you with 2,6-diaminopurine, since he has prepared and distributed a considerable amount. If you will write Dr. R. O. Roblin, Research Laboratories, American Cyanamid Company, 1937 West Main Street, Stamford, Connecticut, I am sure that he can also supply you with 8-azaguanine, which they patented some years ago and which has been the source of most of the azaguanine used in biological studies recently.

I have only had time to skim your extremely interesting manuscript and would like to keep it for a short time so that I may read it carefully. Do you mind? I thought however I would write you immediately so that you could contact the above individuals and obtain the compounds you wish.

I should be very interested in the results with these compounds. Dr. J. Bieseke, here, has observed chromosome breaks in onion root tips to be induced by adenine <sup>and by</sup> 2,6-diaminopurine (of the type produced by <sup>8-~~er~~</sup> orthoxy caffeine). Although such chromosome breaks may occur by a far different mechanism from the mutations which you plan to investigate, I think it might be well to study the effects of adenine in parallel to those of 2,6-diaminopurine.

Sincerely yours,

  
George B. Brown

GBB/ec



1155 East 57th Street  
Chicago 37, Illinois  
January 13, 1951

Dr. George E. Brown  
The Sloan Kettering Institute for Cancer Research  
444 East 68th Street  
New York 21, New York

Dear Dr. Brown:

I just returned to Chicago from New York, and I wish to thank you for your very kind letter of December 19. Our paper has in the meantime appeared in the Proceedings of the National Academy, and if you have any use for the manuscript which I sent you, keep it for as long as you wish and then just throw it away.

That Dr. Biesele finds adenine to cause chromosome breaks is very interesting. We have found adenine to be mutagenic, a concentration of .3 grams per liter increasing the spontaneous mutation rate to T5 resistants by about a factor 3.

Sincerely yours,

Leo Szilard

WV