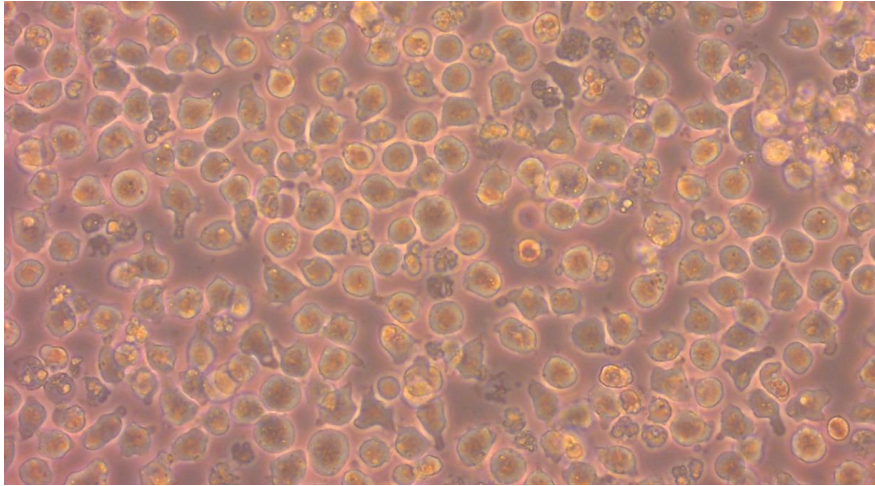


## The world's first introduction of cell biology into anti-cancer drug research

Registration No.	Number 00293		
Registration Date	September 15, 2020	Registration Category	Category 1
Name (Model, etc.)	YOSHIDA Sarcoma YS-TC		
Location	Sendai-shi, Miyagi		
	Institute of Development, Aging and Cancer, Tohoku University		
Owner (Custodian)	Institute of Development, Aging and Cancer, Tohoku University		
Manufacturer (Company)	Tomizou Yoshida		
Year Manufactured	1989		
Year first appeared	1943		
Reason For Selection	<p>The Yoshida sarcoma is a sarcoma cell that can remain suspended in ascites, making it possible to study cancer at cellular level. In 1932 at Tokyo Imperial University Faculty of Medicine, Dr. Yoshida made the world's first discovery that liver cancer could be induced in rat by orally administering chemicals. Further research followed, and in 1943 at Nagasaki Medical College the "Yoshida sarcoma," a cancer cell line suspended in rat ascites, came into being. Dr. Yoshida also found that the resulting cancer cells could be transplanted by injection into the abdomen of another rat. The use of the Yoshida sarcoma made it possible to quantitatively study cancer at cell level (cell biology). The Yoshida sarcoma is significant for its major impact on developments in chemotherapy, including the discovery of nitrogen mustard N-oxide (nitromin), the first anti-cancer drug produced in Japan, in 1952.</p>		
Registration Standard	1-B (Show a uniquely Japanese scientific or technological development from an international perspective.)		
Open/Closed to Public	Closed to Public		
Photo			
Other useful information	<p>Since its discovery, the Yoshida sarcoma has been repeatedly transplanted, cultivated and stored frozen. Tohoku University continues to supply it to research institutions for anticancer drug research to this day, long after the end of Dr. Yoshida's tenure.</p>		