SEKISUI XENOTECH

Rat Tritosomes

XenoTech Offers Rat Tritosomes, lysosomes isolated from animals dosed with Tyloxapol (Triton WR 1339).

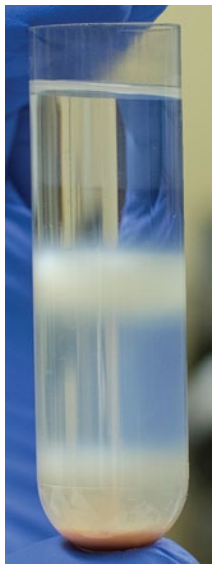
Tritosomes

Rat hepatic tritosomes are lysosomes that have been isolated from the livers of animals dosed with Tyloxapol (Triton WR 1339), a nonionic surfactant. Tyloxapol is taken up by hepatocytes through endocytosis and is trafficked to the lysosomal compartment. Tyloxapol-containing lysosomes exhibit decreased density that allows their efficient isolation from organelles that have overlapping densities with naive lysosomes (Leighton et al., 1968; Trouet, 1974). Density of lysosomes isolated from the livers of rats dosed with Tyloxapol also decreases due to an accumulation of very-low-density lipoproteins elevated in the serum of the animal in response to the administration of the detergent (Hayashi et al., 1982). This hyperlipidemic effect of Tyloxapol found its application in screening for hypolipidemic drugs in animals (Schurr et al., 1972). Tritosomes are well-established test system for study lysosomal composition, function, and diseases (Maguire et al., 1983; Lubke et al., 2009; Della Valle et al., 2011). More recently they have gained popularity as a reagent to assess catabolism of small molecular moieties conjugated to nano-particles, polymers, as well as, antibody-drug conjugates that are processed in the cell along the endosomal-lysosomal pathway (Hreczuk-Hirst et al., 2001; Malugin et al., 2007; Lim et al., 2013; Barrett et al., 2014).

Sekisui XenoTech rat tritosomes are prepared according to a discontinuoussucrose-gradient centrifugation method, based on Bagshaw et al., (2003). Human hepatic microsomes prepared from fresh human livers are a companion custom product to the rat tritosomes. Human lysosomal fractions are characterized for acid phosphatase and cathepsin B activities.

Packaging & Characterization

Product ID **- R0610.LT**
Protein Concentration **- 2.7 mg/mL**
Volume **- 0.25 mL**
Pool Size **- 60 animals**
Tritosomes are characterized for acid phosphatase and RNAse activity.
Sekisui XenoTech also offers **K5200** 10x catabolism buffer that has been formulated and optimized to extract the most *in vitro* catabolic performance from isolated human lysosomes and rat tritosomes (figure 1 of lysosome flyer). All of the catabolic data presented by Sekisui XenoTech utilized this buffer and is crucial for full catabolic activity.



Band of discontinuous sucrose-gradient isolated rat tritosomes

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