(Click here to read our disclaimer)

Lyophilized Alarelin Acetate is stable at room temperature for 90 days,however it should be stored in a freezer below -8C for any extended period of time. After reconstituting Alarelin Acetate should be refrigerated at temperatures not to exceed 36 F.

Alarelin acetate is a gondatrophin releasing hormone. Natural forms of alarelin found in animals are used to induce ovulation. Synthetic versions of this product are created using an LH-RH antagonist which is commonly set in larger doses than the natural LH-RH that is typically found in the rat hypophyseal stimulation or the gondatoropin secretions in induced ovulation or in vitro.

This chemical is the acetate form of the natural hypothalamic peptide which is used by an animal's body to release LH and FSH from the pituitary gland. The peptide alarelin acetate has a single non-glycosylated polypeptide structure that is made up of nine amino acids. This has a molecular mass of 1167.3.

Alarelin is commonly used in research settings both to better understand this peptide's effects on an animal's body and to induce conditions that may assist with reproductive research. Samples of this chemical intended for research settings are typically stable for around three weeks at room temperature, and will need to be stored at temperatures below -18 degrees Celsius for long term use.

Most versions of this chemical are shipped as a lyophilized powder that can be reconstituted at a sterile temperature. This chemical may remain stable for up to three weeks at room temperature if it is kept sealed when it is not in use. If this product will be used for long periods of time is should be kept in a freezer with a waterproof sea.

If the mixture has already been reconstituted it can be kept at 40 degrees Celsius for 2-7 days but should be kept at -180 degrees Celsius for longer periods of time. Do not continually refreeze and thaw the product.

Effects on FSH Receptors

A study was performed to determine the effects of alarelin as a GnRH antagonist on the follicle-stimulating hormone receptor of the pituitary gland of ewes.

- Twenty-eight ewes were randomly assigned to groups which were injected with alarelin antigens twice a day, versus a control group that was injected with a solvent.
- Samples of the ovaries were then taken 70 days following this treatment and blood samples were harvested from the jugular vein at even intervals throughout the study following the initial injection.
- Groups that were exposed to alarelin acetate were found to see a higher concentration of GnRH antibodies than those that were in the control group. FSHR cells that were immunostained were found in the ovaries of those that were exposed to this chemical as well.

These increased secretions were found to promote the development of follicles and ovaries within the ewes. This implies that this chemical may have potential in future technique involving superovulation strategies.

Most versions of alarelin acetate are designed to be diluted using an aqueous solution to create the necessary application size for the given experimental setting. It is recommended that alarelin only be reconstituted when it is ready for use. If this product will be in storage for a long period of time it may be necessary to add a carrier protein as a means of protection.

Sources:

http://www.usbio.net/item/A2298-09T
http://www.sciencedirect.com/science/article/pii/S0921448812000776