

TD.06596

Irradiated Uniprim Diet (2018, 4100 ppm)



Description

TD.06596 is Teklad Global 18% Protein Rodent Diet (2018) with 4,100 ppm Uniprim[®] added prior to irradiation. The resulting diet contains 1,365 ppm of the sulfonamide sulfadiazine and 275 ppm trimethoprim supplying approximately 180 - 220 mg sulfadiazine/kg mouse/day and 35 - 45 mg trimethoprim/kg mouse/day assuming a 25 g mouse. Sulfadiazine and sulfamethaxazole are considered equally effective sulfonamides^{1, 2}.

Use

Uniprim diet is fed as a prophylactic treatment to immunocompromised rodents. This includes models lacking cell-mediated immune capability or B- and T-cell assisted humoral immunity such as athymic (nude) mice and rats, SCID mice, a wide variety of transgenic models, and animals that have undergone irradiation.

Immunocompromised models are more susceptible to infection from environmental bacteria (including *Pneumocystis murina*) and protozoa than conventional rodent models thus prophylactic treatment with Uniprim can be helpful in reducing infection rates in these models. Use of TD.06596 to administer sulfadiazine and trimethoprim through diet reduces labor costs compared to other dosing methods.

Protocols for prophylactic treatment with Uniprim containing diet will vary. Previously, diet has been fed continuously for shorter-term treatments³⁻⁵, or every other week for longer-term studies^{6, 7}. Consult your veterinarian when developing a treatment program.

Research Considerations

Secondary effects may occur with Uniprim treatment and careful monitoring is recommended. Although sulfonamide treatment is associated with hypothyroidism, the lower level of sulfonamide in TD.06596 has been shown to have no thyroid related effects⁸. Reduced growth rates of weaning animals and reduced reproductive performance have been observed with sulfonamide treatment while risk of secondary effects are minimized in adult animals^{8, 9}.

References

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Speak with a Nutritionist

- + (800) 483-5523
- + askanutritionist@envigo.com

Teklad Diets are designed & manufactured for research purposes only.

Key Features

- + Uniprim
- + Sulfadiazine
- + Trimethoprim

Storage and Stability

TD.06596 should be stored below 70°F and 50% relative humidity. Diet processing, irradiation and storage has minimal effects on sulfadiazine and trimethoprim concentration.

Use this diet as directed by a veterinarian

Typical Uniprim Levels

	Sulfadiazine, ppm	Trimethoprim, ppm
Irradiated	1367 (n=9)	288 (n=9)
Stored 9 months	1370 (n=1)	229 (n=1)

Selected Nutrient information¹

	% by weight	% kcal from
Protein	18.6	28
CHO	44.2	58
Fat	6.2	18
Kcal/g	3.1	

¹ Values are calculated from ingredient analysis or manufacturer data

Key Planning Information

- + Use within 6 months
- + Lead time:
- + · Shipped within 2 weeks

Product Specific Information

- + Round Pellet
- + Nutritionally complete
- + Irradiated
- + Heat Sealed, 25 pound capsac

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