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Halobetasol Propionate

National Cancer Institute

Source

National Cancer Institute. *Halobetasol Propionate*. NCI Thesaurus. Code C47553.

The propionate salt form of halobetasol, a synthetic corticosteroid with anti-inflammatory, antipruritic, and vasoconstrictor activities. Halobetasol, a topical steroid, diffuses across cell membranes to interact with cytoplasmic corticosteroid receptors located in both the dermal and intradermal cells, thereby activating gene expression of anti-inflammatory proteins mediated via corticosteroid receptor response element. Specifically, this agent induces phospholipase A2 inhibitory proteins, which inhibit the release of arachidonic acid, thereby inhibiting the biosynthesis of potent mediators of inflammation, such as prostaglandins and leukotrienes. As a result, halobetasol reduces edema, erythema, and pruritus through its cutaneous effects on vascular dilation and permeability.