Corticotropin

Also called: ACTH; Adrenocorticotropic hormone; Acthar Gel; Repository corticotropin injection; Purified Cortrophin Gel

What it is

Adrenocorticotropic hormone, marketed as Acthar Gel and Purified Cortrophin Gel, repository injections approved in the 1950s; Acthar is FDA-approved for infantile spasms and MS relapses.

Approval status

FDA Approved. Approved in the US as Acthar Gel (Mallinckrodt), NDA 008372, first approved April 29, 1952, with the infantile spasms application H.P. Acthar Gel, NDA 022432, approved October 15, 2010; and as Purified Cortrophin Gel (ANI Pharmaceuticals), NDA 008975, first approved June 16, 1954 (Drugs@FDA via openFDA and both labels, read October 3, 2026).

Dosing, as printed in the page's Recommended Dosing box

Manufacturer's recommended dosing (FDA label)

From the prescribing information. Other doses studied, if any, are in the full dosing data below.

Protocol and source	Dose	Frequency	Duration	Route
Label: infantile spasms **[Approved label]** Acthar Gel prescribing information (DailyMed set 7b48ddec, version 32, effective October 13, 2026), section 2.2	150 U/m²/day as 75 U/m² twice daily	Twice daily	2 weeks, then taper over 2 weeks	Intramuscular (vial only)
Label: MS exacerbations **[Approved label]** Acthar Gel prescribing information (DailyMed set 7b48ddec, version 32, effective October 13, 2026), section 2.3	80 to 120 units	Once daily	2 to 3 weeks; may need taper	Intramuscular or subcutaneous
Label: other indications **[Approved label]** Acthar Gel prescribing information (DailyMed set 7b48ddec, version 32, effective October 13, 2026), section 2.4	40 to 80 units	Every 24 to 72 hours	Individualised; may need taper	Intramuscular or subcutaneous

Educational information, not medical advice. Each dose above is tagged with its source: an approved label, a published human study, animal data, or amounts reported by users. None is a recommendation for you. An unapproved compound has no established safe or effective human dose, and products sold for "research use only" are not made or tested for people. Talk to a doctor before acting on anything on this site, including before you start, stop or change any medicine or dose.

Key human evidence

The first 3 of the 11 human studies carded on the page (15 study cards in all):

• **High-dose ACTH vs prednisone for infantile spasms** (Human, 1996). In a randomised trial with a blinded assessor, 13 of 15 infants given ACTH for two weeks stopped spasms and cleared the hypsarrhythmic EEG (86.6%), against 4 of 14 on prednisone (28.6%). **PMID 8604274**

• **MS relapse: ACTH against IV methylprednisolone** (Human, 1989). In a double-blind randomised trial in 61 patients, both groups improved markedly, with no difference in the rate of recovery or the final outcome. **PMID 2544829**

• **Acute optic neuritis: against IV methylprednisolone** (Human, 2023). 37 people were randomised; at six months retinal nerve fibre layer loss was -13.1 µm on repository corticotropin and -11.7 µm on methylprednisolone (P = 0.88), with similar visual recovery. **PMID 37261907**

Interactions

From the FDA label's drug-interaction section (Mallinckrodt. ACTHAR GEL (repository corticotropin injection) US prescribing information, section 7. DailyMed version 32, effective October 13, 2026, read October 27, 2026):

• With diuretics: may accentuate diuretic-associated electrolyte loss; no formal interaction studies were performed (FDA label)

• With Diuretics (caution, FDA label): More electrolyte loss.

Side effects and cautions

Reported side effects	Contraindications and cautions
• Steroid effects: the label attributes its adverse effects primarily to the cortisol it releases • Hormonal side effects during high-dose treatment of infants • Raised blood pressure, fluid retention and low potassium • Behavioural and mood disturbances	• Infections, whose risk it may raise; live vaccines are contraindicated at immunosuppressive doses • Cushing's syndrome during use, and adrenal insufficiency on withdrawal • Gastrointestinal perforation and bleeding; effects on growth and bone in children • Diuretics: it can add to their electrolyte loss • May cause fetal harm in pregnancy

Five questions to ask

1. Is Corticotropin right for me, and is the labelled dose on this sheet right for my weight, age, kidney and liver function?
2. Here are the medicines and supplements I take. Do any of them interact with Corticotropin? This sheet lists the interactions on record.
3. Which side effects should make me stop and call you, for example steroid effects: the label attributes its adverse effects primarily to the cortisol it releases?
4. Do any of the cautions on this sheet apply to me, such as: Infections, whose risk it may raise?
5. What should we check before I start and while I am on it (blood tests, blood pressure, weight), and how often?

Grey Peptides is a vendor-neutral encyclopedia: it sells nothing and names no seller. This sheet is educational, not medical advice, and is not a prescription.