KPV

Tripeptide (Lys-Pro-Val) from the C-terminus of alpha-MSH

CARD 101

CLASS	CLINICAL CATEGORY	EVIDENCE LEVEL	OVERALL STATUS
Melanocortin-derived tripeptide	Inflammation research (gut / skin)	Very low / preclinical	Not approved — research



KEY APPLICATIONS

- **Intestinal inflammation** — Mouse colitis models
- **Epithelial signaling** — Cell studies
- **Skin and wound** — Preclinical interest
- **Delivery research** — Hydrogels, animal data

Studied for: intestinal and skin inflammation. No completed human trials establish efficacy or safety for any use.

HOW IT WORKS IN THE BODY

KPV → PepT1 uptake → NF-κB signaling → Inflammatory cytokines

- Matches **alpha-MSH residues 11-13**.
- Taken up by the **PepT1 transporter** in intestinal and immune cells (cell studies).
- Reduced **NF-κB and MAP kinase** signaling in cell models.
- Mouse colitis effects appeared **partly independent of MC1R**.

QUICK PRACTICAL INFO

HALF-LIFE	ROUTES STUDIED
Not established in humans	Oral and rectal (animal research)
PHARMACOKINETICS	**STABILITY**
No human data	Unstable in solution (formulation research)
INTERACTIONS	**MONITORING**
Not determined	Not defined outside research

EVIDENCE & SAFETY

EVIDENCE

VERY LOW
PRECLINICAL

- Cell and **rodent colitis** models only.
- **No published human efficacy trials.**
- An advisory vote is **not evidence of benefit**.

CLINICAL CAUTION

- Human safety and kinetics **not established**.
- **Not FDA-approved** for any use.
- **Variable quality** in unregulated products.
- Caution in **pregnancy and lactation**.

REGULATORY STATUS

FDA	EMA	ANVISA	WADA	Research	503A (US)
Not approved as a drug	Not authorized	Status not confirmed	Check the current list (S0)	Yes, preclinical	Panel vote Jul 2026; rule pending

CLINICAL READ IN 10 SECONDS

- Tripeptide fragment of **alpha-MSH**.
- Studied in **mouse colitis** models.
- **No human efficacy data.**
- **Not a validated therapy**; FDA rulemaking pending.

KEY REFERENCES

Dalmasso et al., 2008 — Gastroenterology (PepT1 and KPV)

Kannengiesser et al., 2008 — Inflamm Bowel Dis (murine IBD)

Sun et al., 2021 — ACS Biomater Sci Eng (rectal hydrogel, rats)

FDA Pharmacy Compounding Advisory Committee, 23-24 Jul 2026 (advisory vote)

Technical, informational content. It does not replace individualized clinical judgment or constitute a recommendation. No dose, protocol or source is provided.