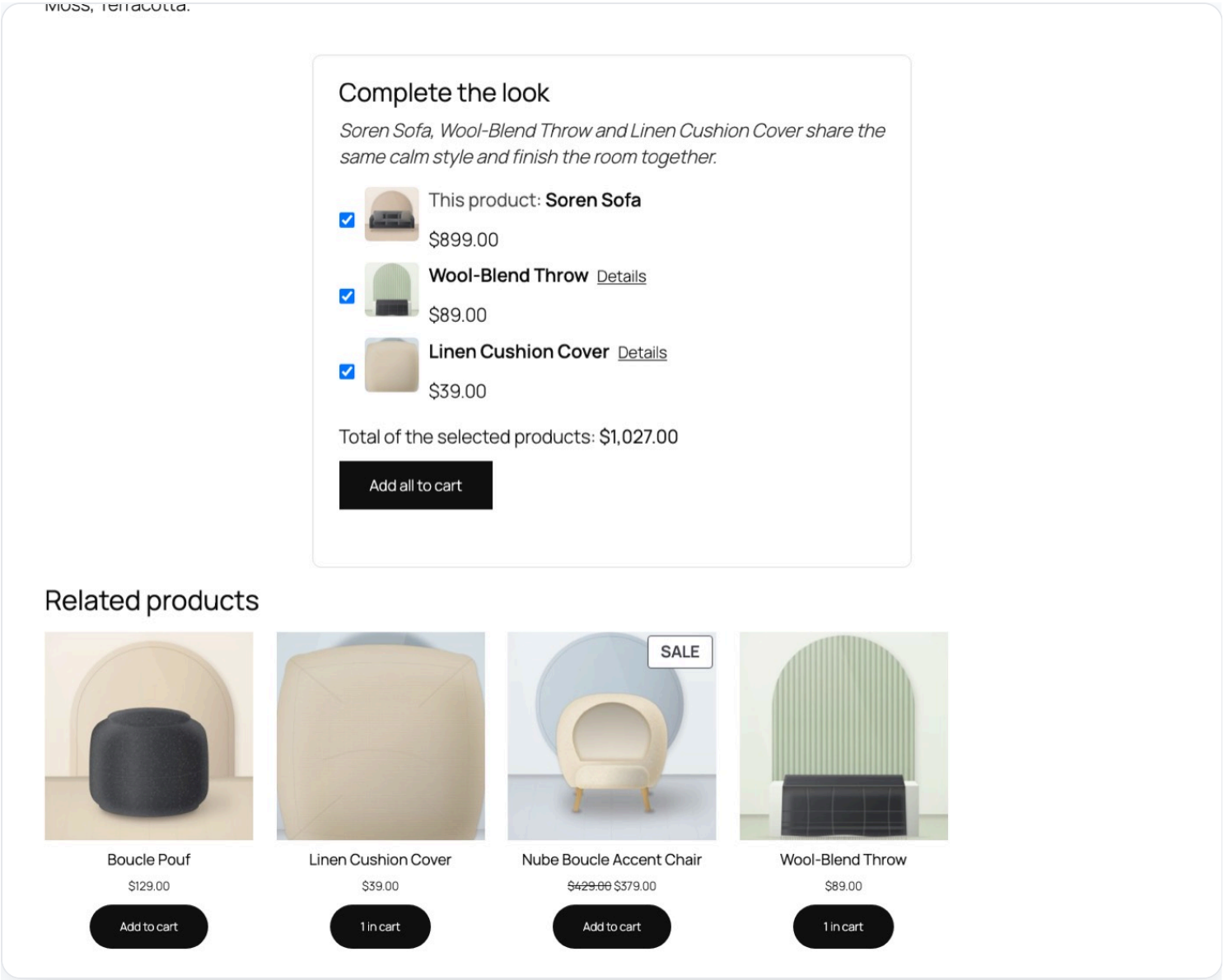
AI Recommender

A guide to AI Product Recommender and Bundles for WooCommerce: connecting your AI account, indexing the products, counting the orders, the ranking, the preview, the shop sections, pins and exclusions, the explanation lines, the settings and the measured performance.

1. Start here

In plain words: WooCommerce's own related products are random products of the same category or tag. **AI Product Recommender and Bundles** ranks them with two signals: the **meaning** of your product texts (AI embeddings) and what your customers **bought together** (counted on your site from your orders). It shows related products, a **“Complete the look” bundle** with an **Add all to cart** button and suggestions on the **cart** page, and an admin **preview** shows why each product is suggested.



A product page: the bundle with the total and Add all to cart, then the related products.

> **Tip:** The AI is used only to embed your product texts (once per product, and again when a text changes) and, if you turn it on, to write one short explanation line per bundle. Showing recommendations never calls the AI.

2. What you get

Feature	What it does
Meaning similarity	The title, categories, tags, visible attributes and descriptions of each published product are embedded in batches; the most similar products of each product are computed on your server and stored.
Bought together	Counted locally from your completed orders (HPOS or the legacy order storage, through WooCommerce's own order API). Only pairs of products and counts are stored.
Blending	Two weights for related products, two for bundles and the cart page, a minimum similarity and a minimum number of orders.
Display	Automatic placement on the product page (replace the WooCommerce related products or add a section), the cart page and optionally the order received page, plus a block and a shortcode.
Add all to cart	Each product is checked again on the server: part of the bundle, visible, purchasable, in stock; variable products need a chosen option; quantities capped. Prices come from WooCommerce.
Preview	For any product: the related products and the bundle with the score, the similarity in %, the times bought together and the products left out with the reason.
Rules	Exclude categories, tags and products, out-of-stock products; hidden, private, draft and password-protected products are never shown; pins per product override the exclusion rules.
Fallback	Related products by category and tag when there is no AI or order data, or when the AI is down.
Explanation line	Optional, off by default: one short line per bundle, written once, reviewed by a person.
Privacy	No tracking of visitors, no cookie of the plugin, no customer data stored or sent.
Arabic	The plugin and this guide are in English and Arabic; the admin works right to left.

3. Requirements

Item	Details
WordPress	6.0 or newer
PHP	7.4 or newer
WooCommerce	8.0 or newer (HPOS and block checkout compatible)
Also	An embedding model (for example text-embedding-3-small at OpenAI) for the meaning similarity. Anthropic has no embedding endpoint: use an OpenAI-compatible provider for the embeddings. Without any AI the bought-together counts and the fallback still work.
An AI provider	An account and an API key with an OpenAI-compatible service (OpenAI, OpenRouter, Azure, a local server such as Ollama...) or with Anthropic. You pay your provider for what you use; the plugin has no usage fees.
License	GPL-2.0-or-later

4. Install

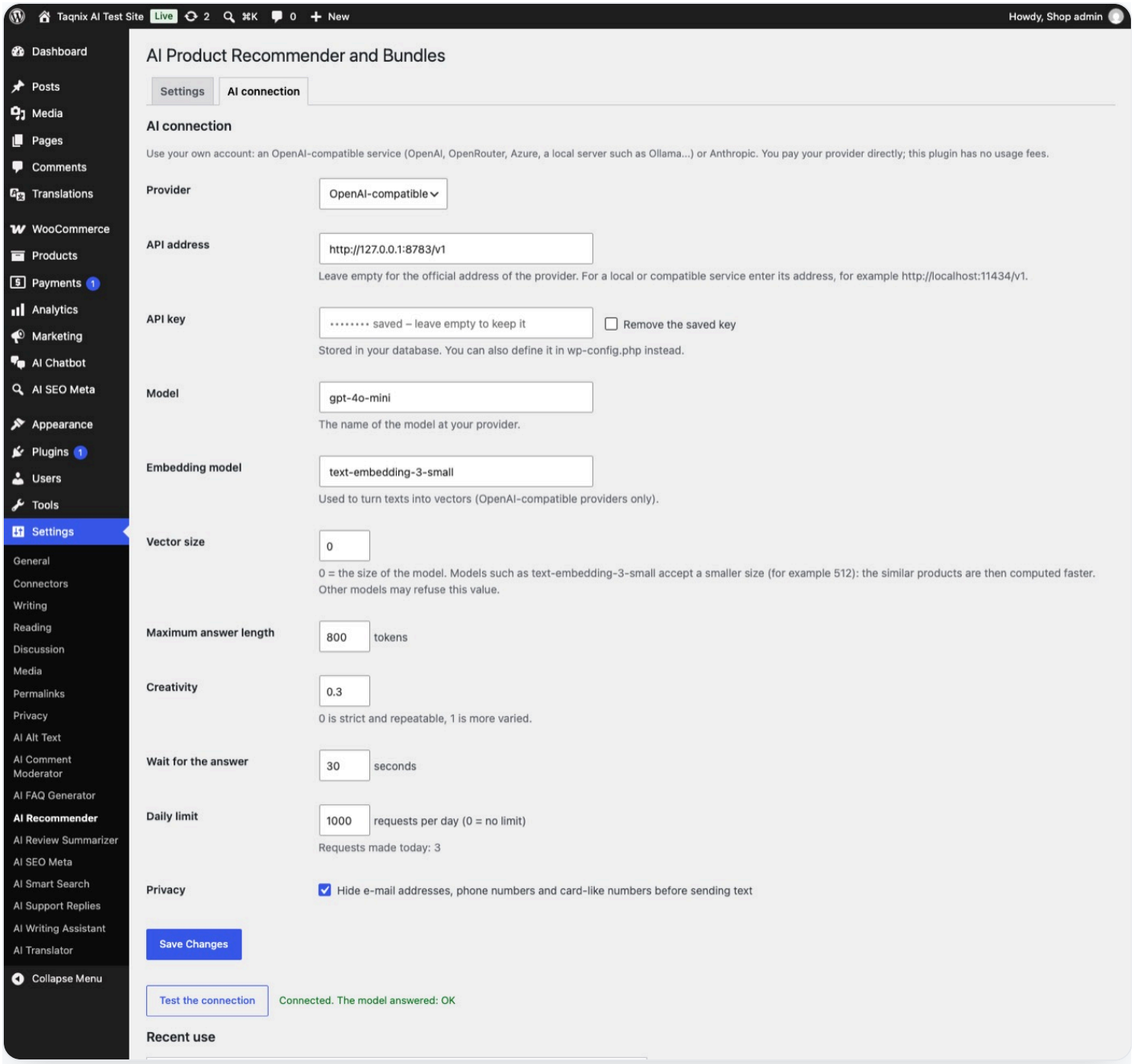
1. Unzip the package you downloaded. Inside is `ai-product-recommender-and-bundles-for-woocommerce.zip` (do not unzip this one).
2. In WordPress open **Plugins → Add New Plugin → Upload Plugin**, choose `ai-product-recommender-and-bundles-for-woocommerce.zip` and press **Install Now**.
3. Press **Activate Plugin**. WooCommerce must be active.
4. Open **Settings → AI Recommender → AI connection**, choose your provider, paste your API key and press **Test the connection**.

5. Connect your AI

> **In plain words:** The plugin works with **your own** AI account. In **Settings → (this plugin) → AI connection** choose the provider, paste the key and press **Test the connection**: a green message tells you that the model answered.

Field	Meaning
Provider	OpenAI-compatible (OpenAI, OpenRouter, Azure, Groq, Ollama, LM Studio…) or Anthropic.
API address	Leave empty for the official address. For another service enter it, for example `http://localhost:11434/v1`.
API key	Stored in your database (never shown again). You can define it in `wp-config.php` instead and the field disappears.
Model	The model name at your provider. A small, cheap model is enough for most tasks.
Maximum answer length	Caps the tokens of one answer, so a request cannot cost more than you expect.
Daily limit	The number of requests the plugin may make per day (0 = no limit). When it is reached the plugin stops asking until tomorrow.
Privacy	Hides e-mail addresses, phone numbers and card-like numbers before the text is sent.

> **Tip:** The table **Recent use** at the bottom of the tab shows the requests, the errors and the tokens of the last days.

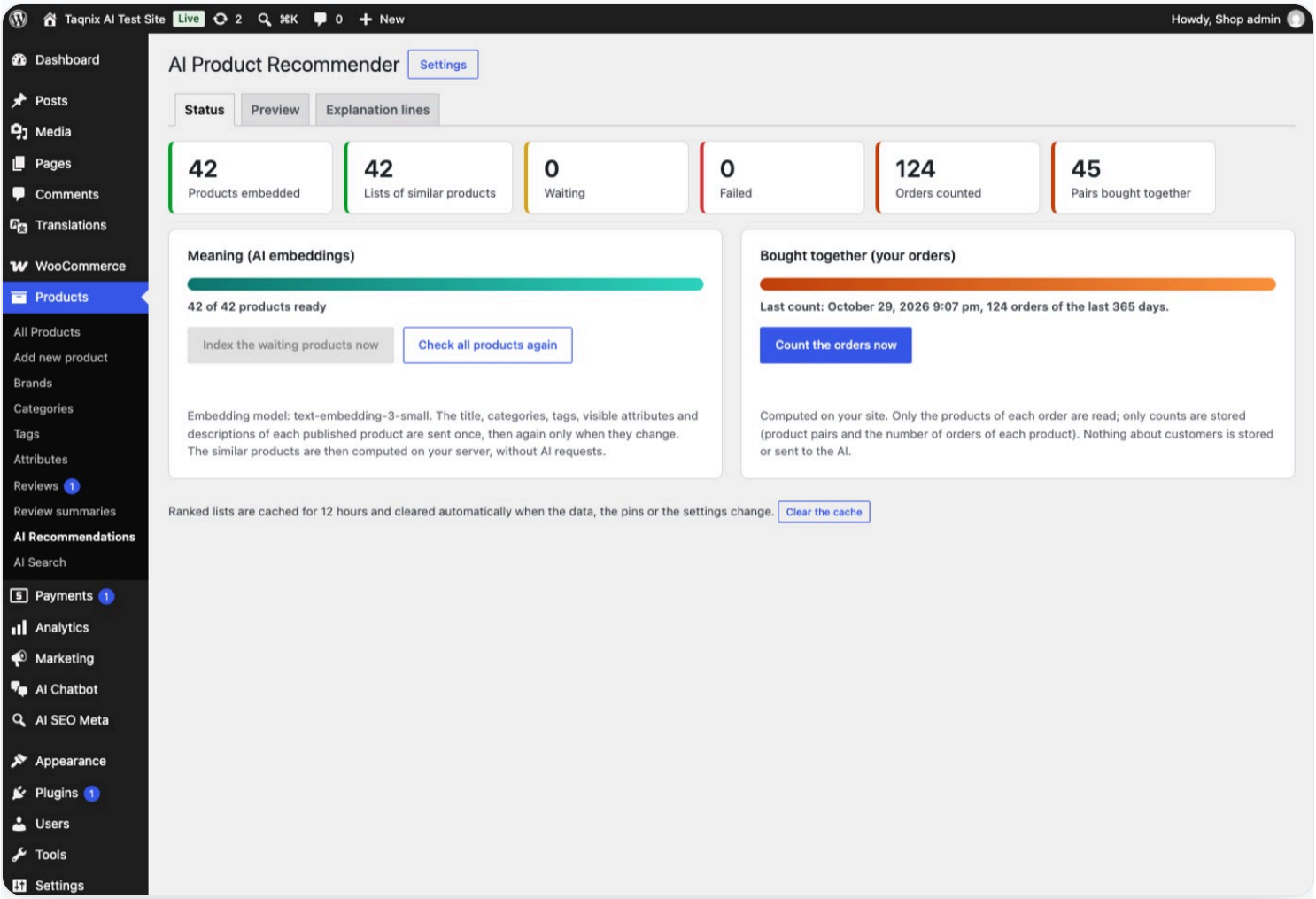


The AI connection tab after a successful test, with the embedding model and the vector size.

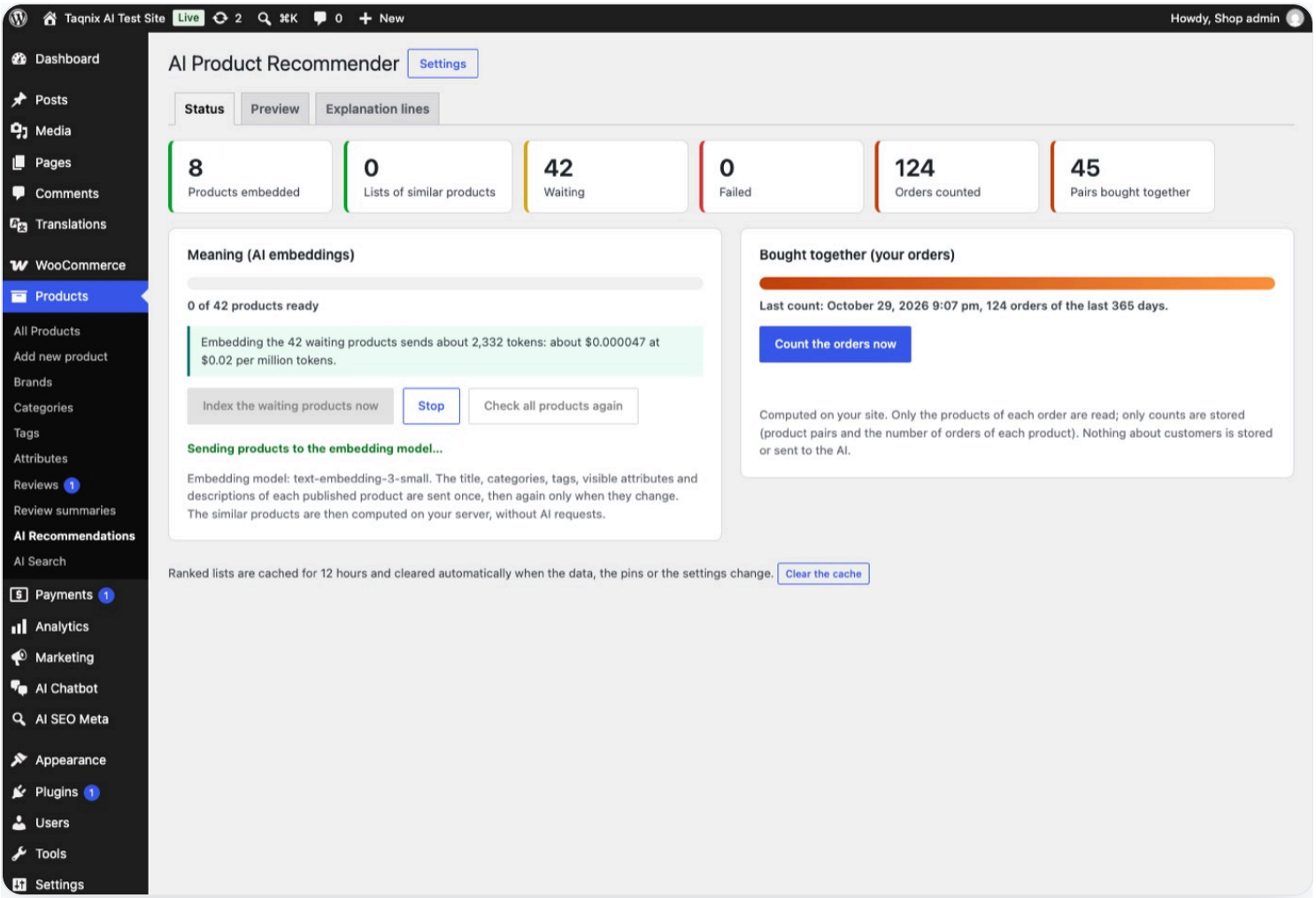
> **Tip: Vector size**: 0 keeps the size of the model. Models such as text-embedding-3-small accept a smaller size (512 or 256): the similar products are then computed several times faster (see the chapter Performance). The daily limit is 1,000 requests by default.

6. Index your products

In plain words: Open **Products → AI Recommendations**. The **Status** tab shows the products embedded, the lists of similar products, the products waiting and failed, and an **estimate** of the tokens and the price before you start. Press **Index the waiting products now**: the products are sent in small batches, then the similar products are computed on your server. You can **Stop** at any time; the rest runs in the background (Action Scheduler, or WP-Cron).



The Status tab: counters, the index and the bought-together count.



A run in progress.

> **In plain words:** When a product is saved its text is compared with the indexed one: only a real change is sent again, a few seconds later. A product that is trashed, set to draft or protected by a password leaves the index and every list.

7. Bought together

> **In plain words:** Press **Count the orders now** once; then the count runs again every day (or every week, or never: setting). Orders of the chosen statuses (Completed by default) created in the period (365 days by default) are read in batches of 100. Of each order only the list of products is used; orders with more different products than **Largest order counted** (30) are skipped. The new counts replace the old ones in one step at the end.

Stored	Not stored
Product A, product B, number of orders with both	Customers, addresses, e-mails, prices, dates or numbers of the orders
Number of orders of each product	Anything about visitors

8. How products are ranked

In plain words: For a product, the candidates are its most similar products (similarity from 0 to 1) and the products bought together with it. The share of its orders that also had the other product (*bought together ÷ orders of the product*) gives the second signal. The score is `(weight of the meaning × similarity + weight of bought together × share) ÷ (sum of the weights)`. A product never bought together is kept only when its similarity reaches the **minimum similarity** (35% by default), and pairs seen in fewer than **2** orders are ignored.

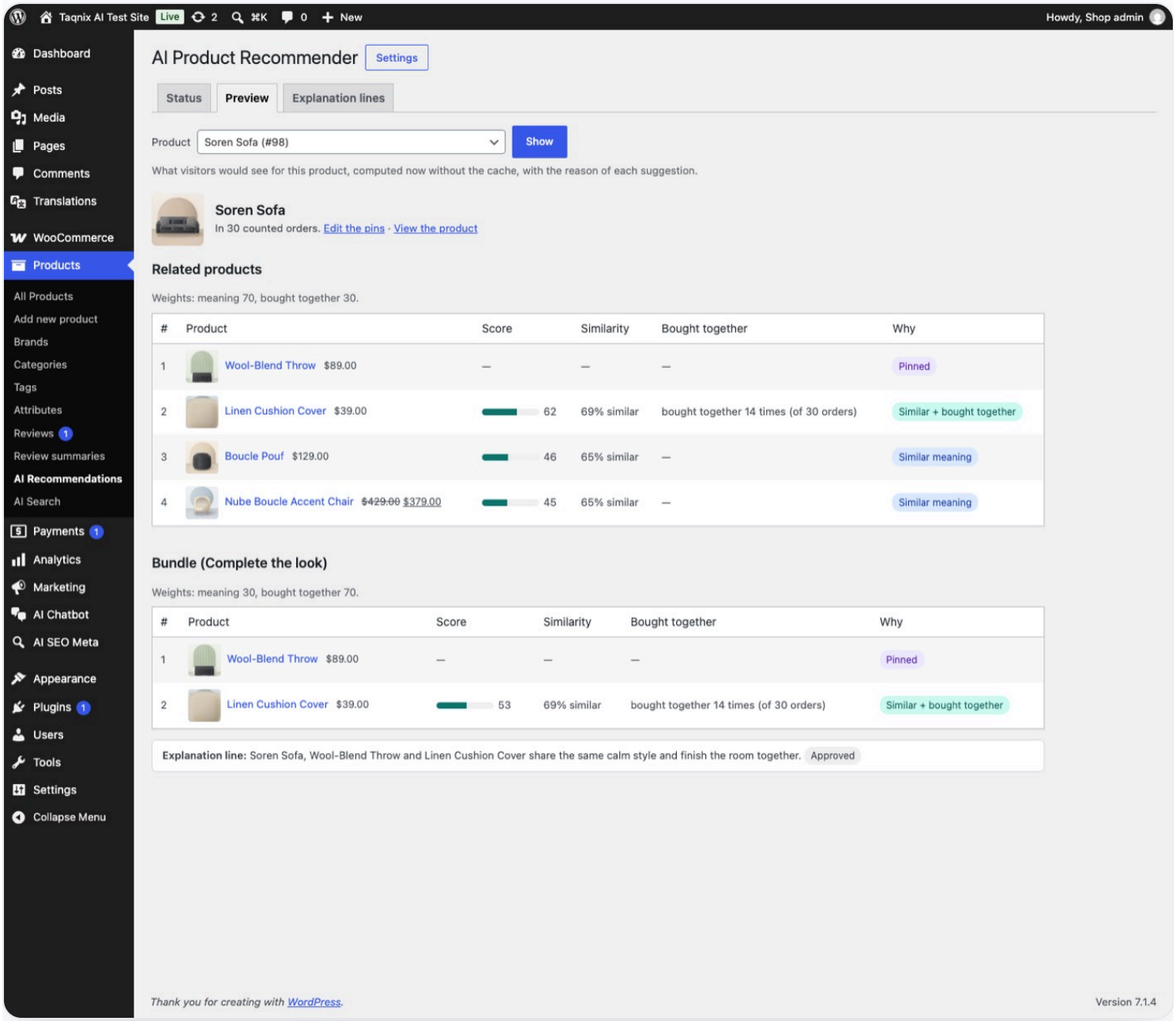
List	Default weights	Why
Related products	meaning 70, bought together 30	Alternatives and close products
Bundle and cart	meaning 30, bought together 70	Products that complete each other

In plain words: In a bundle, products of the same category as the main product are skipped by default (another sofa is an alternative to a sofa, not a complement). Then come the pins of the product, the rules and the fallback.

9. Preview: what would be recommended, and why

In plain words: The tab **Preview** takes any product and shows the related products and the bundle exactly as visitors would get them, computed without the cache, with the **score**, the

> **similarity in %**, **bought together N times (of M orders)** and a badge: Pinned, Similar meaning, Bought together, Similar + bought together, or Same category or tag (fallback). Below, the products **left out** and the reason (out of stock, hidden, excluded category, same category...).

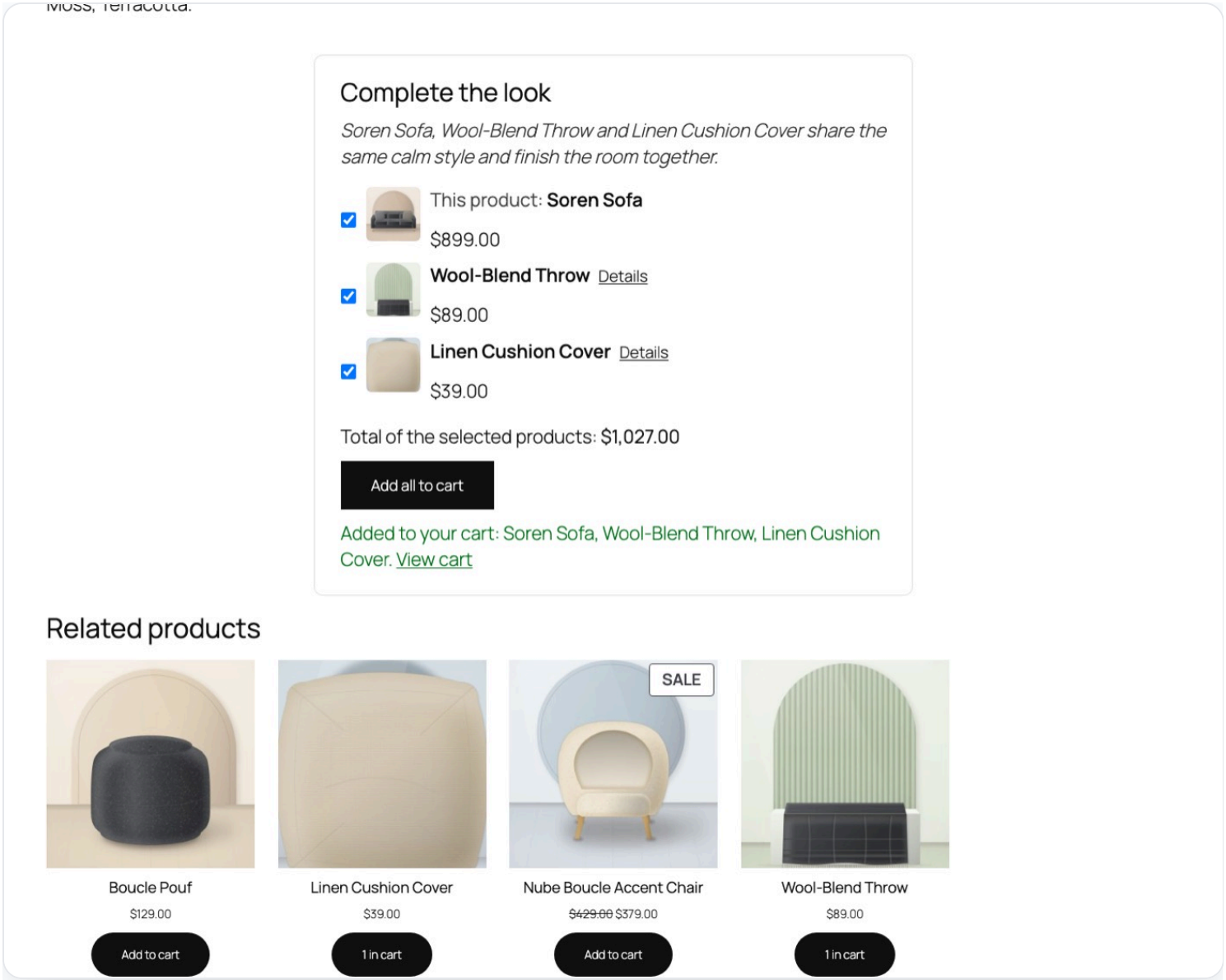


The preview of a sofa.

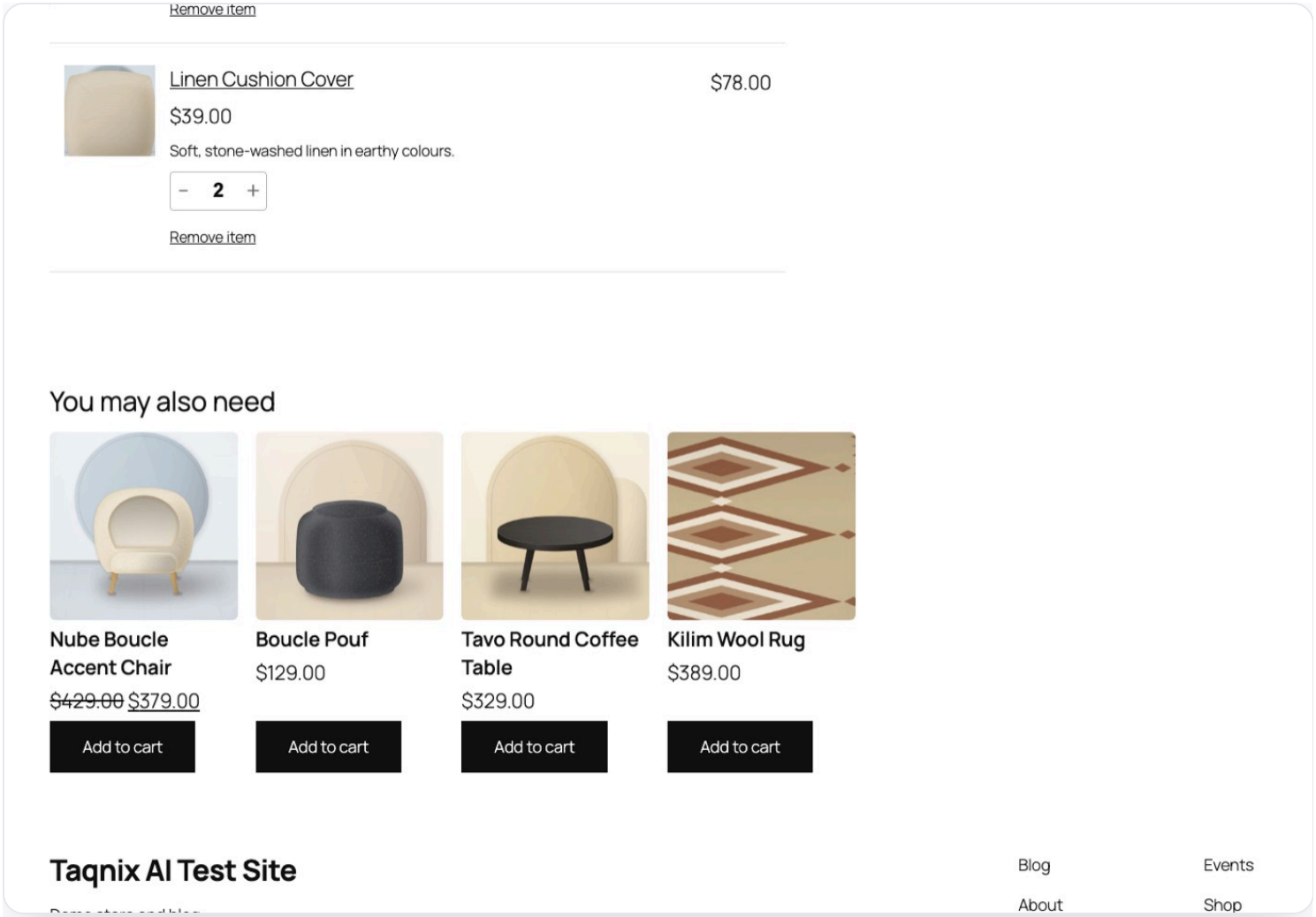
10. On the shop

Place	What is shown
Product page: related products	Replace (default): the WooCommerce Related products section shows the plugin's products, with your theme's look; in block themes the block keeps its own sort order. Add: a section of the plugin. Do not change.
Product page: bundle	“Complete the look”: the product and 2 suggested products (1-4), with checkboxes, the total of the selected products and Add all to cart; below the summary or below the add to cart button.
Cart page	“You may also need”, for all the products in the cart (classic cart and Cart block).
Order received page	Optional: suggestions for the products of the order.
Block and shortcode	The block “AI product recommendations” and `[tqpr_recommendations type="related|bundle|cart" product="ID" limit="4" title="..."]`.

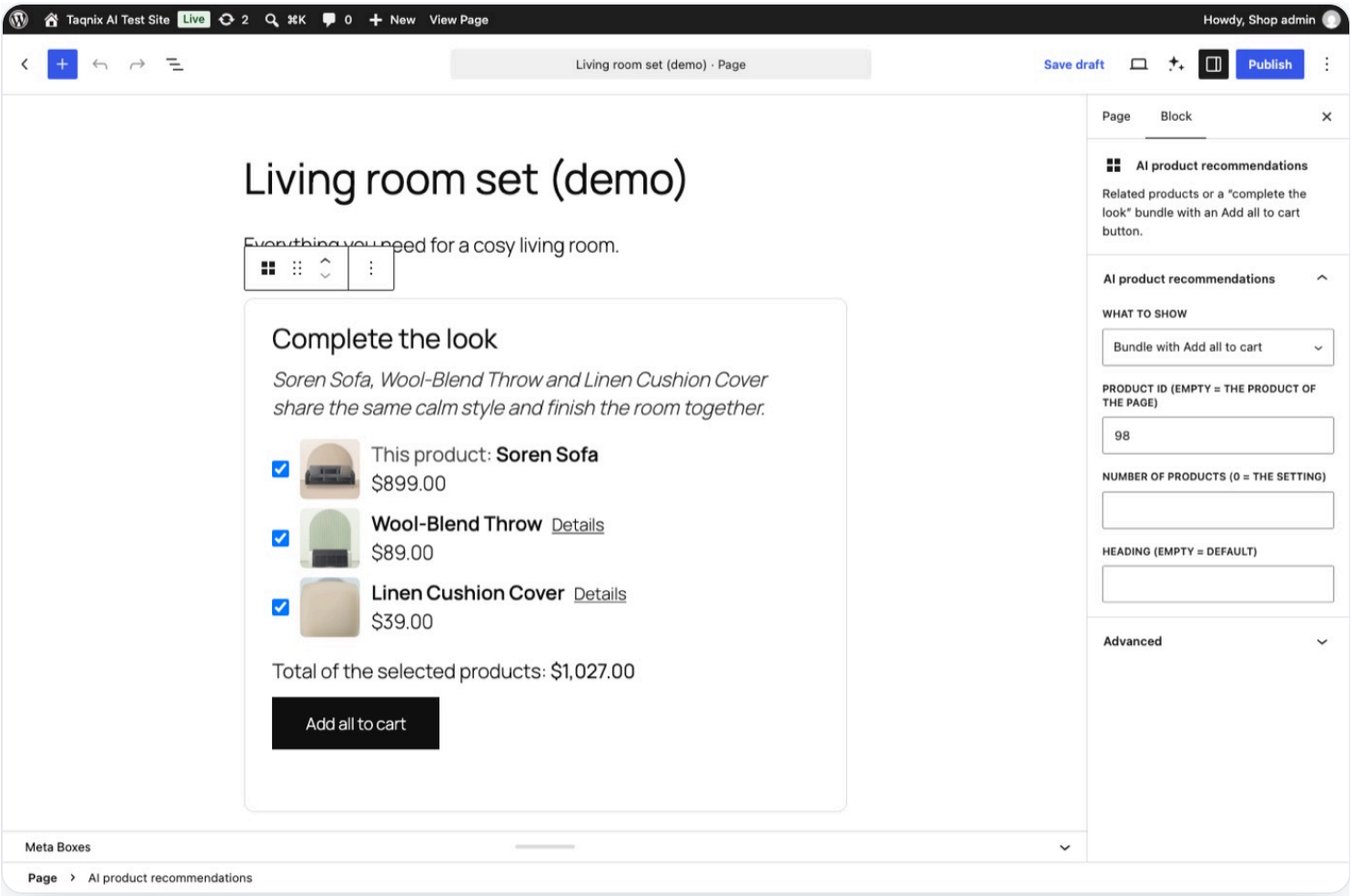
Moss, Terracotta.



After Add all to cart: what was added, and a link to the cart.



The cart page.



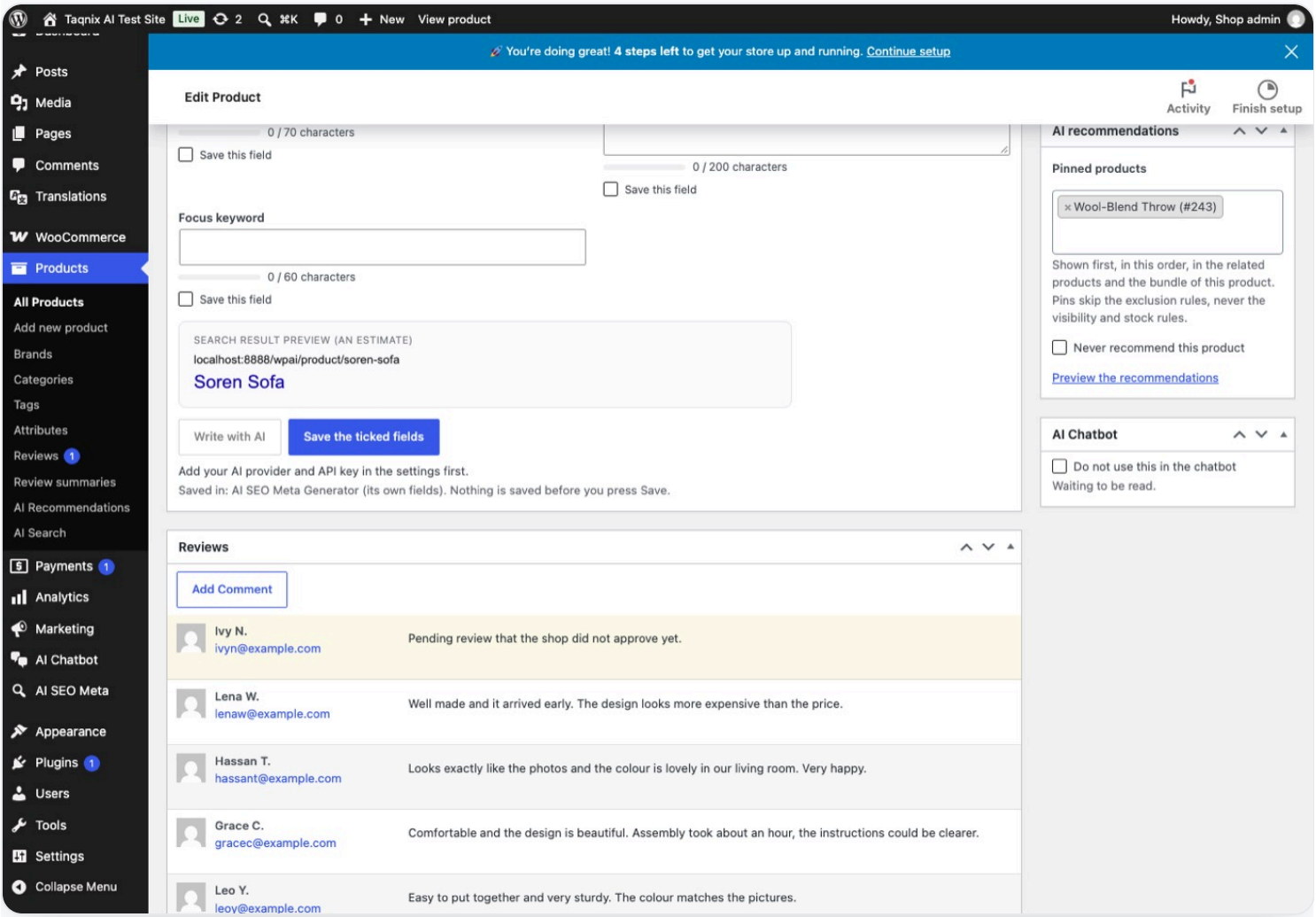
The block in the editor.

> **In plain words:** **Add all to cart** checks each product again on the server: it must belong to the bundle of the page, be visible, purchasable and in stock; a variable product needs an option chosen in its list (otherwise it is skipped and the shopper is told); at most 10 products and a capped quantity. The prices are those of WooCommerce (taxes and sale prices as your shop shows them).

> **Important:** There is no bundle discount in this plugin. If you want one, use your pricing or discount plugin (for example a rule for products bought together).

11. Pins and exclusions

> **In plain words:** In the product edit screen the box **AI recommendations** holds the **pinned products** (shown first, in your order, in the related products and the bundle of this product) and **Never recommend this product**.

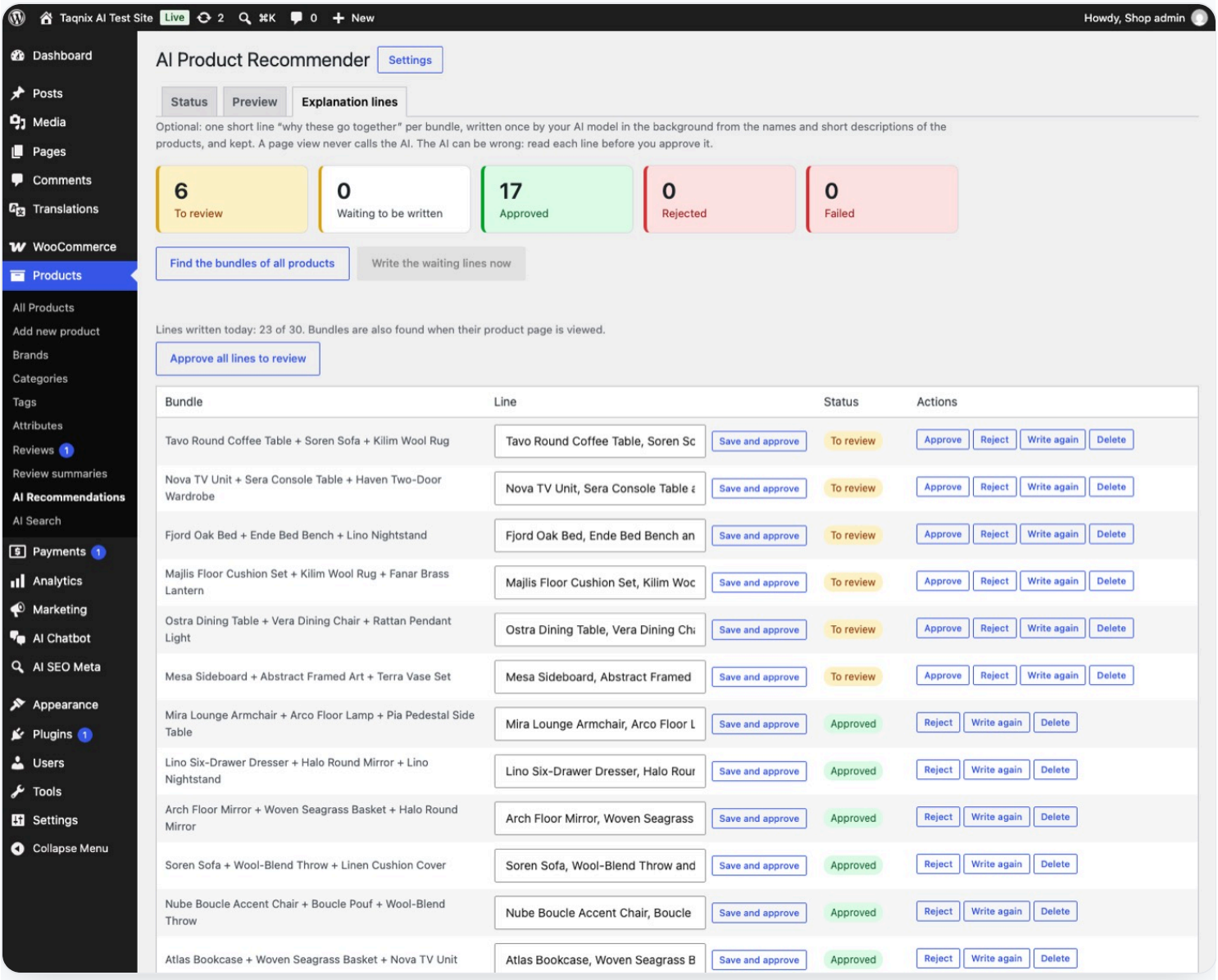


The box in the product edit screen.

Rule	Pins
Hidden, private, draft, password-protected products	Never shown, pinned or not
Out of stock (setting, on by default)	Never shown, pinned or not
Excluded categories, tags, products, “Never recommend”	A pin overrides them

12. Explanation lines (optional)

> **In plain words:** Off by default. When it is on, each bundle shown on the shop is queued once; a background job asks your chat model for one short line (at most 20 words, from the names and short descriptions of the products, delimited as data) and keeps it. With **Review** on (default) a line appears only after a person approved it in the tab **Explanation lines**, where each line can be edited, approved, rejected or written again. At most 30 lines per day by default.

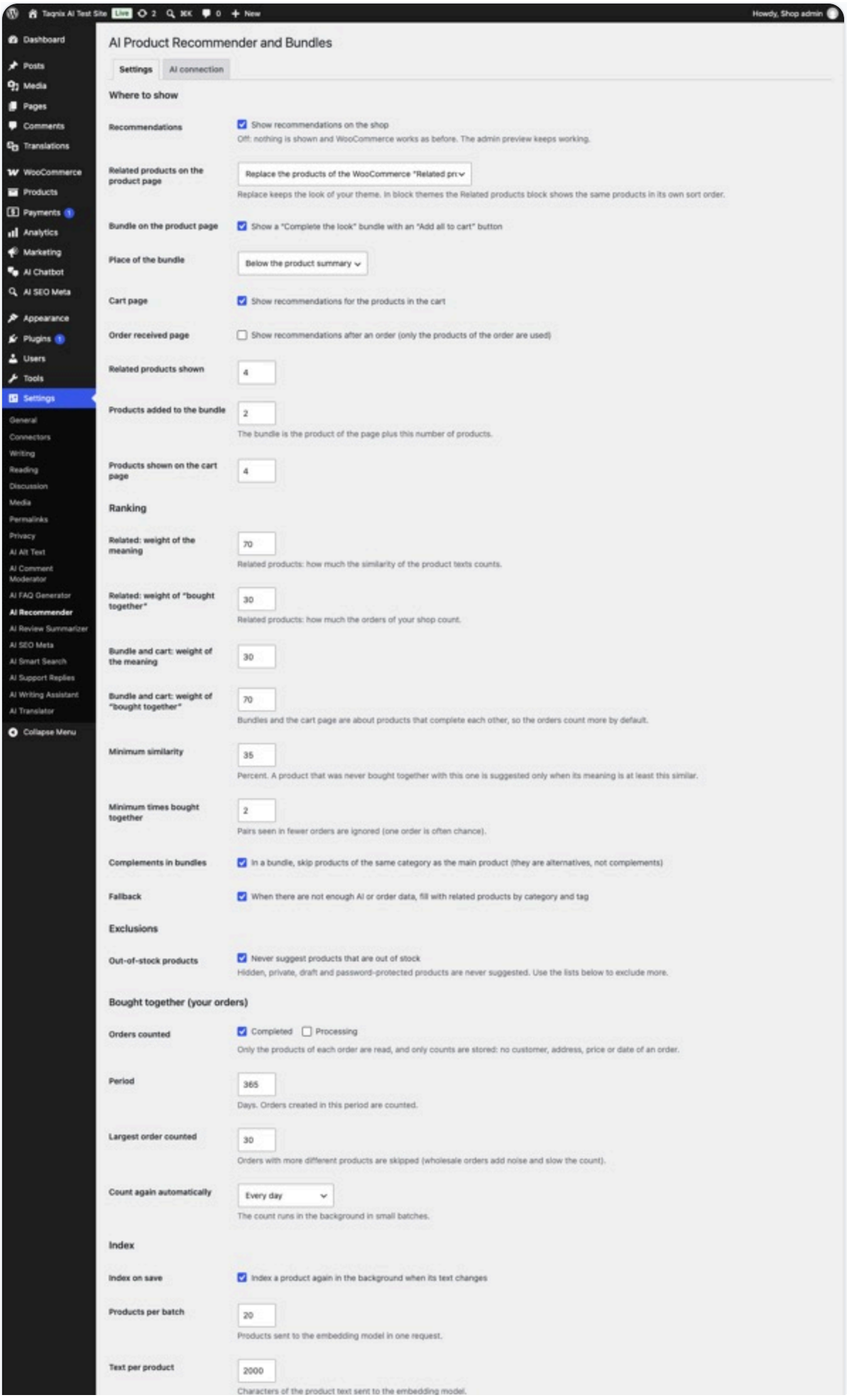


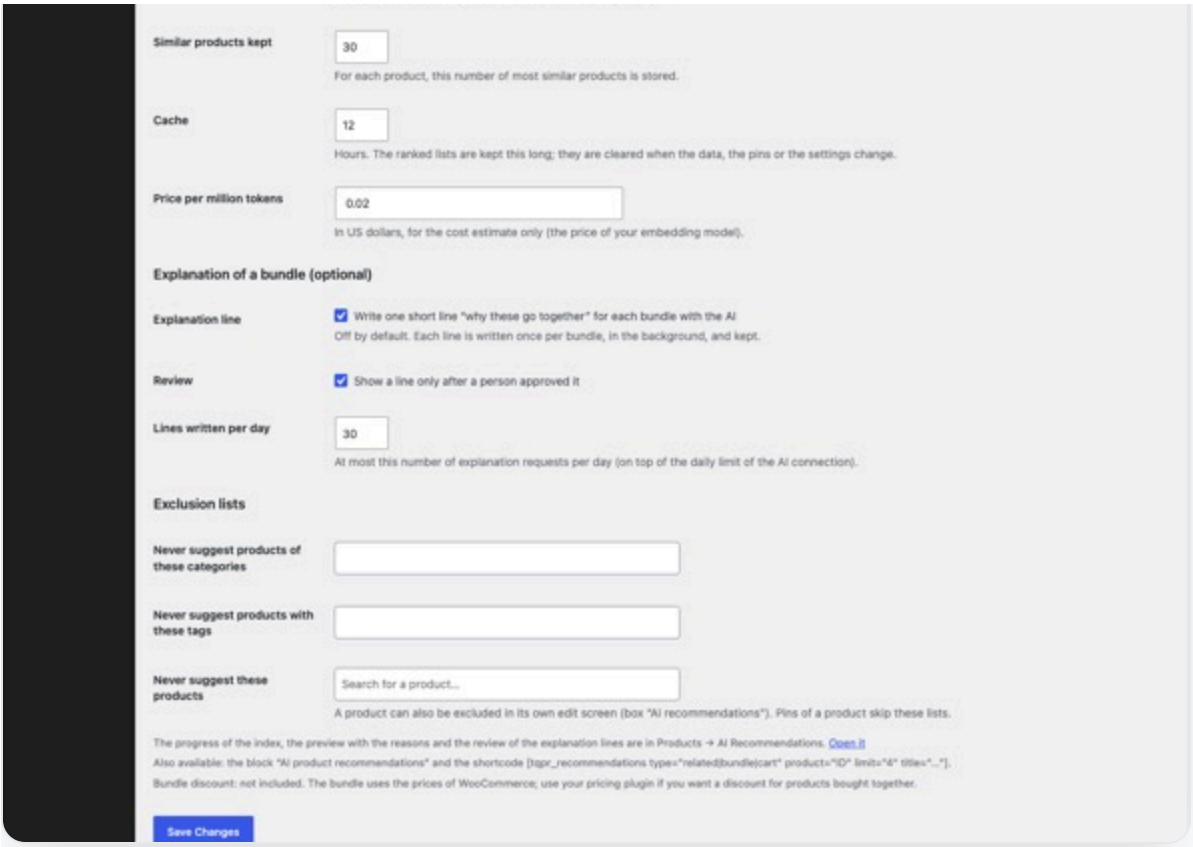
Lines to review and approved lines.

> **Important:** The AI can be wrong or vague. Read each line before you approve it.

13. Settings

> **In plain words:** Settings → AI Recommender.


Taqnix AI Test Site
Live
New
Howdy, Shop admin
Dashboard
Posts
Media
Pages
Comments
Translations
WooCommerce
Products
Payments
Analytics
Marketing
AI Chatbot
AI SEO Meta
Appearance
Plugins
Users
Tools
Settings
General
Connectors
Writing
Reading
Discussion
Media
Permalinks
Privacy
AI Alt Text
AI Comment Moderator
AI FAQ Generator
AI Recommender
AI Review Summarizer
AI SEO Meta
AI Smart Search
AI Support Replies
AI Writing Assistant
AI Translator
Collapse Menu
AI Product Recommender and Bundles
Settings
AI connection
Where to show
Recommendations
Show recommendations on the shop
Off: nothing is shown and WooCommerce works as before. The admin preview keeps working.
Related products on the product page
Replace the products of the WooCommerce "Related pr
Replace keeps the look of your theme. In block themes the Related products block shows the same products in its own sort order.
Bundle on the product page
Show a "Complete the look" bundle with an "Add all to cart" button
Place of the bundle
Below the product summary
Cart page
Show recommendations for the products in the cart
Order received page
Show recommendations after an order (only the products of the order are used)
Related products shown
4
Products added to the bundle
2
The bundle is the product of the page plus this number of products.
Products shown on the cart page
4
Ranking
Related: weight of the meaning
70
Related products: how much the similarity of the product texts counts.
Related: weight of "bought together"
30
Related products: how much the orders of your shop count.
Bundle and cart: weight of the meaning
30
Bundle and cart: weight of "bought together"
70
Bundles and the cart page are about products that complete each other, so the orders count more by default.
Minimum similarity
35
Percent. A product that was never bought together with this one is suggested only when its meaning is at least this similar.
Minimum times bought together
2
Pairs seen in fewer orders are ignored (one order is often chance).
Complements in bundles
In a bundle, skip products of the same category as the main product (they are alternatives, not complements)
Fallback
When there are not enough AI or order data, fill with related products by category and tag
Exclusions
Out-of-stock products
Never suggest products that are out of stock
Hidden, private, draft and password-protected products are never suggested. Use the lists below to exclude more.
Bought together (your orders)
Orders counted
Completed
Processing
Only the products of each order are read, and only counts are stored: no customer, address, price or date of an order.
Period
365
Days. Orders created in this period are counted.
Largest order counted
30
Orders with more different products are skipped (wholesale orders add noise and slow the count).
Count again automatically
Every day
The count runs in the background in small batches.
Index
Index on save
Index a product again in the background when its text changes
Products per batch
20
Products sent to the embedding model in one request.
Text per product
2000
Characters of the product text sent to the embedding model.



The settings tab.

Option	Meaning
Recommendations	The main switch.
Where to show	Related products, bundle and its place, cart page, order received page, numbers of products.
Ranking	The weights, the minimum similarity, the minimum times bought together, complements in bundles, the fallback.
Exclusions	Out-of-stock products and the lists of categories, tags and products.
Bought together	Order statuses, period, largest order counted, automatic count.
Index	Index on save, products per batch, text per product, similar products kept, cache hours, price for the estimate.
Explanation	On/off, review, lines per day.

14. Cache and performance

In plain words: A page view reads two short lists from the plugin's tables and ranks them; the result is cached (12 hours by default) and cleared when the counts or the lists change, when the settings change, or when the pins of a product change. Stock and visibility are checked on every view, so an out-of-stock product disappears at once. **Clear the cache** is on the Status tab.

In plain words: The similar products are computed in PHP on your server, in batches of a few seconds. Measured on a test machine (Apple Silicon Mac, PHP 8.3, MySQL 8.0) with synthetic vectors:

Catalogue	Measured
1,000 products, vector size 256	about 20 seconds of background work for all lists (0.017 s per product)
1,000 products, vector size 1536	about 1.6 minutes (0.095 s per product)
10,000 products, vector size 256	about 29 minutes (0.17 s per product)
10,000 products, vector size 512	about 1 hour (0.36 s per product)
10,000 products, vector size 1536	about 4.5 hours (1.6 s per product)
One batch	2.5 to 3.3 seconds, peak memory 42 MB or less
A page view	reading the stored list of a product: about 0.06 ms; the ranked lists are then cached
Counting 1,000 orders	1.3 seconds in 11 batches of 100

In plain words: Your server may be slower or faster. Above about 10,000 products use a smaller vector size; for catalogues of tens of thousands of products a dedicated vector database is the better tool, and this plugin does not include one.

15. Limits

Limit	Detail
Not personalised	The suggestions depend on the products, not on the visitor: there is no tracking, no history and no cookie.
New shops	Without orders the bought-together part is empty and the meaning and the fallback work alone.
Bundle discount	Not included (see On the shop).
Providers	Embeddings need an OpenAI-compatible endpoint; Anthropic can write the explanation lines only.
Accuracy	Embeddings and order counts can suggest odd products. Check important products in the Preview and use pins and exclusions.
Block themes	The Related products block keeps its own sort order; the Cart block section is updated on the next page load.
Product types	Bundles take simple and variable products; grouped and external products are not added by Add all to cart.
Page caching	The product page sections are the same for every visitor and can be cached. The cart section (and the block or shortcode of type cart) depends on the cart of the visitor: show it only on pages your caching plugin does not cache (the WooCommerce cart and checkout pages are excluded by caching plugins by default). The Add all to cart button carries a WordPress security token that is valid for 12 to 24 hours: keep the page cache lifetime of product pages under 12 hours, or the button asks the visitor to reload the page.
Screenshots	The pictures were taken on a demo furniture shop with demo orders and a deterministic test embedding service (not a real AI model). The scores shown are illustrations; real results depend on your model, products and orders.

16. Privacy

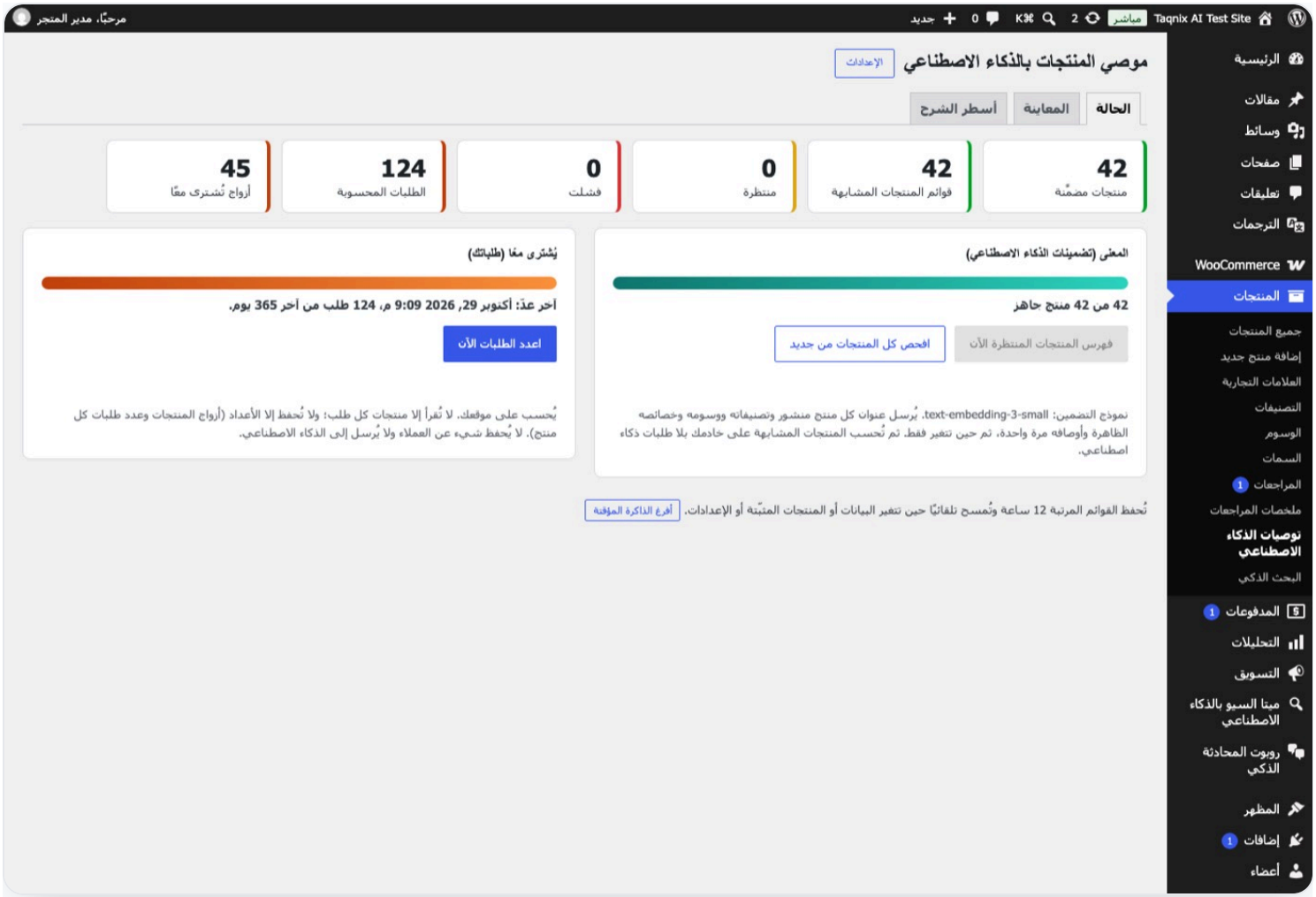
In plain words: Using an AI model means sending text to your provider. When a product is indexed its title, descriptions, attributes, categories and tags are sent; with the explanation lines on, the names and short descriptions of the products of a bundle. No customer or order data is ever sent: the bought-together counts are computed on your site. E-mail addresses, phone numbers and card-like numbers are masked first (an option, on by default). Nothing is sent to Taqnix. Mention your AI provider in your privacy policy: the plugin adds a suggested paragraph in **Settings → Privacy**.

Important: AI can be wrong. Treat what it writes as a draft and read it before you publish it.

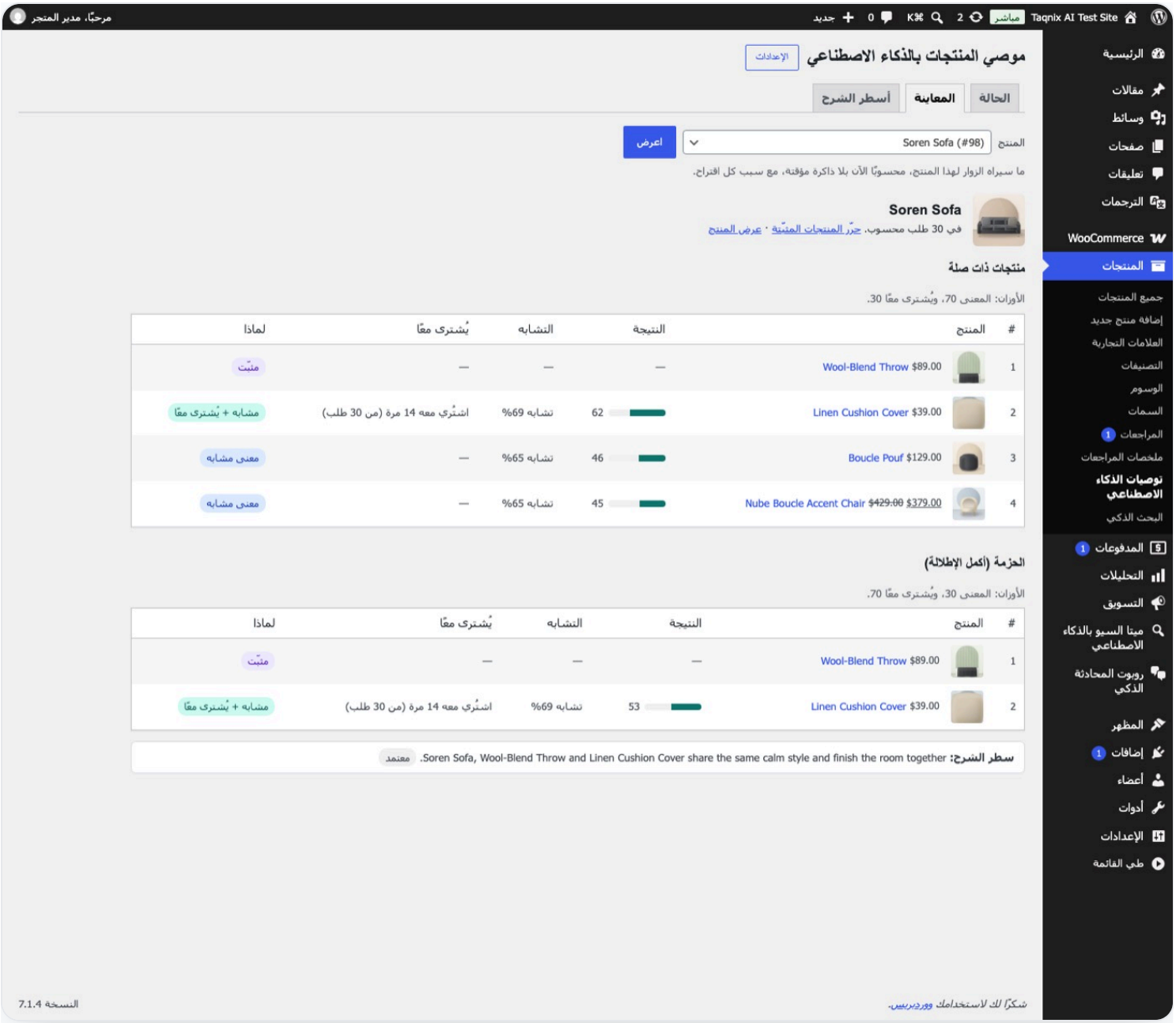
17. Who can do what

Who	Can
Administrators	Change the settings and the AI connection.
Shop managers (manage_woocommerce)	Index, count the orders, preview, review the lines, clear the cache.
Product editors	Pins and Never recommend of the products they can edit.
Visitors	See the suggestions and use Add all to cart (security token, checks of every product).

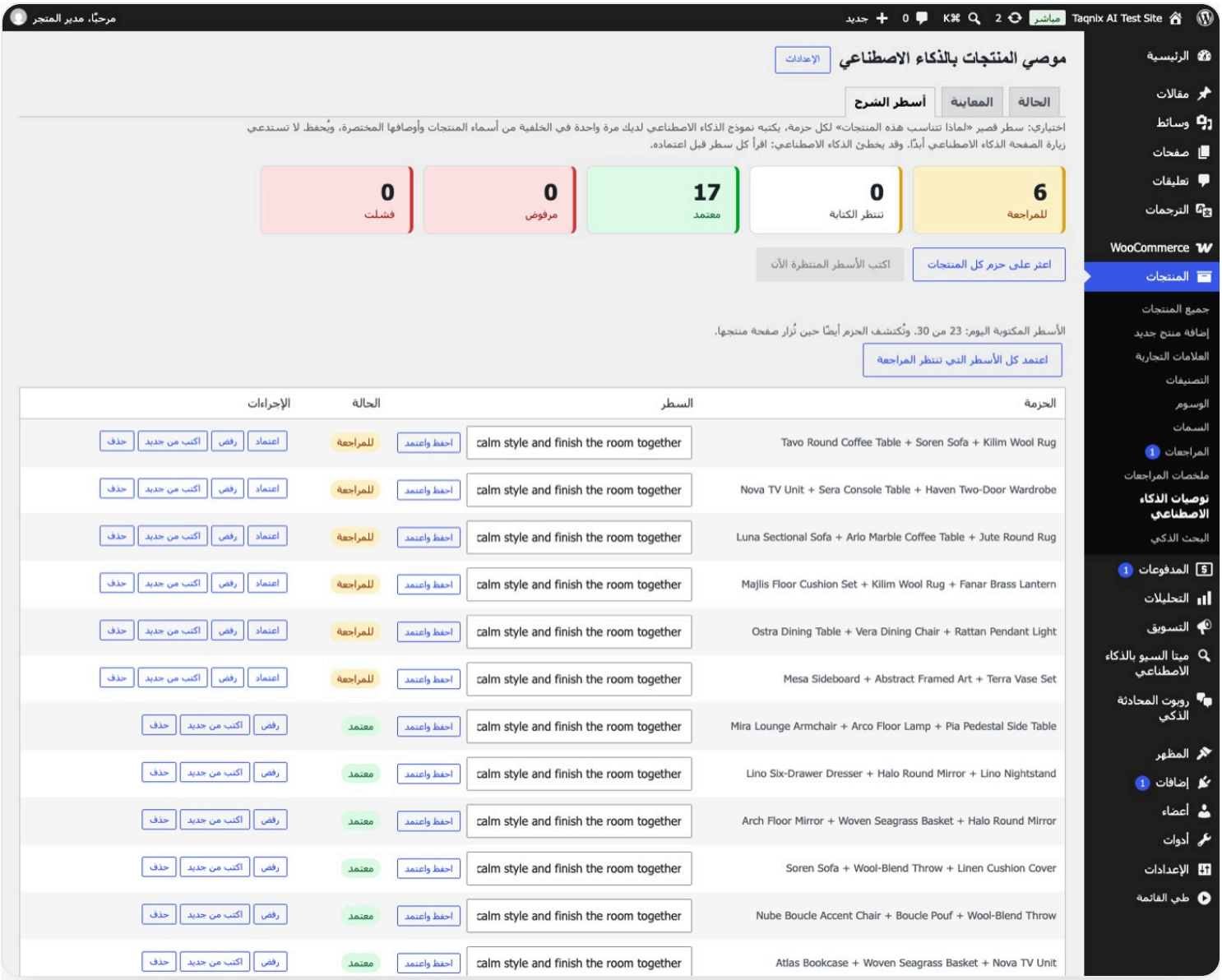
18. Arabic and right to left



The Status tab in an Arabic WordPress.



The preview, in Arabic.



The explanation lines, in Arabic.

19. For developers

> **In plain words:** Skip this chapter if you only use the plugin. Tables: `{prefix}tqpr_index` (vectors), `{prefix}tqpr_similar` (lists), `{prefix}tqpr_pairs` (counts), `{prefix}tqpr_pairs_build` (count in progress), `{prefix}tqpr_explain` (lines).

```
// The recommendations from your own code (ids, scores, reasons)
$res = TQPR_Engine::recommend( $product_id, 'bundle', 3 );

// Add a brand or any meta to the text that is embedded
add_filter( 'tqpr_product_text', function ( $text, $product ) {
        return $text . "\nBrand: " . $product->get_meta( 'brand' );
}, 10, 2 );

// Never recommend some products (return a short reason)
add_filter( 'tqpr_visible', function ( $ok, $product ) {
        return $product->get_meta( 'b2b_only' ) ? 'b2b' : $ok;
}, 10, 2 );

// Highest quantity of one product added by the bundle button (default 10)
add_filter( 'tqpr_bundle_max_qty', function () { return 3; } );

// The key can live in wp-config.php
define( 'TQPR_AI_KEY', 'sk-...' );
```

20. Troubleshooting

Problem	What to do
Only “Same category or tag” suggestions	No embeddings yet and no counts: index the products and count the orders.
The AI service answered 401	The key is wrong or has no access to the model.
The AI service answered 400 or 404	The embedding model name or the vector size is not accepted: set the vector size to 0.
Products stay waiting	Background jobs run on visits (WP-Cron) or through Action Scheduler: see WooCommerce → Status → Scheduled Actions, or press the button.
A product should never appear	Mark it Never recommend, or exclude its category or tag.
A variable product is skipped by Add all to cart	The shopper must choose an option in its list first.

21. Updating and removing

Install the new zip over the old one in **Plugins → Add New Plugin → Upload Plugin** (WordPress offers to replace the current version), or replace the folder `ai-product-recommender-and-bundles-for-woocommerce` by FTP. Your settings, the index, the counts and the lines are kept. To remove the plugin, deactivate and delete it: its settings are removed with it.

Deleting the plugin also drops its five tables and removes the pins, the cached lists and its scheduled jobs. Products and orders are never changed.

22. Support

Installation help and bug fixes are included for 6 months, with lifetime updates. Contact us through the marketplace page where you bought the plugin or write to **support@taqnix.com** with your WordPress

version, the plugin version and a screenshot.

Changelog

1.0.0 – Initial release

- Related products and “complete the look” bundles from AI embeddings blended with bought-together counts
- Bought-together counts computed locally from completed orders (HPOS and legacy storage), counts only
- Add all to cart with server-side validation, variations, stock and capped quantities
- Admin preview with the reasons, pins, exclusion rules, fallback by category and tag
- Background indexing with progress, re-index on save, cache with invalidation, atomic daily AI limit
- Optional reviewed explanation line per bundle; block, shortcode, cart and order received sections; Arabic translation

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