

# PRODUCT DATA SHEET



**CATALOG NO.:** SA-470

**LOT NO.:** temp

**PRODUCT:** Anti-ADAM12 (Meltrin  $\alpha$ ), Catalytic Domain

**IMMUNOGEN:** Recombinant human ADAM12 catalytic domain. ADAM12 is a glycosylated transmembrane protein with multiple domains, including an SH3 consensus sequence, a pro-protein convertase (e.g. furin) cleavage site, an active metalloproteinase region, a disintegrin-like domain, and an EGF-like repeat<sup>1,2</sup>. It can cleave diverse substrates such as HB-EGF<sup>3</sup>, while the short, soluble form, ADAM12-S, cleaves IGFBP-3 and -5<sup>4,5</sup>.

**SPECIFICITY:** Recognizes all latent and active forms of human ADAM12, but not ADAM10 or ADAM17. Because ADAM12 is glycosylated and subject to multiple cleavages, band migration seen on immunoblots will vary. The full-length proform of ADAM12 will run at approximately 155 kDa (reduced), followed by smaller cleaved forms.

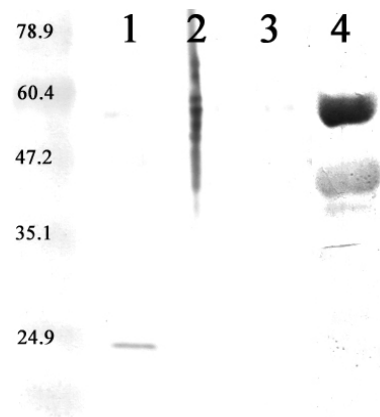
**APPLICATIONS:** Immunoblotting; other applications not yet tested. Recommended starting dilution for immunoblotting using colorimetric substrates is 1:750 (a higher dilution is recommended for chemiluminescent substrates). Suggested incubation conditions for immunoblotting: following blocking incubation, rock overnight at 4°C with antibody diluted in blocking solution. Due to rapid conversion of zymogen to active form, addition of EDTA (5 mM) to the sample harvest buffer is recommended.

**FORM:** 100  $\mu$ l rabbit serum

**STORAGE:** Store undiluted at -80°C for at least six months. Do not thaw until ready to use. Once thawed, aliquot and re-freeze unused antibody. If needed, keep a working aliquot at 4°C for at least one month (add NaAzide to 0.05% as preservative).

## REFERENCES:

1. S. Yamamoto *et al. Immunol. Today* 1999 20 278
2. M.L. Moss *et al. Drug Discov. Today* 2001 6 417
3. M. Asakura *et al. Nat. Med.* 2002 8 35
4. Z. Shi *et al. J. Biol. Chem.* 2000 275 18574
5. F. Loechel *et al. Biochem. Biophys. Res. Commun.* 2000 278 511



Western blot analysis of ADAM12. Lane 1: Recombinant ADAM12 catalytic domain (10 ng). Lane 2: Recombinant ADAM10 (50ng). Lane 3: Recombinant ADAM17 (50ng). Lane 4: Human renal carcinoma lysate, showing two glycosylated, processed forms of ADAM12. The membrane was probed with anti-ADAM12 rabbit polyclonal antibody [SA-470] at 1/750 dilution. The secondary antibody was GAR-AP (1/2500) and the blot was developed with BCIP/NBT.

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