

PAR2 (D61D5) Rabbit mAb

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H	Endogenous	32	Rabbit IgG	#P55085	2150

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

PAR2 (D61D5) Rabbit mAb recognizes endogenous levels of total PAR2 protein. The major band detected runs at 32 kDa, the higher molecular weight smear is due to glycosylation.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly44 of human PAR2 protein.

Background

PAR2 (F2RL1) belongs to the PAR (Protease-activated Receptor) family of G protein-coupled receptors. These membrane receptors are activated through N-terminal cleavage of the receptor by a serine protease such as thrombin, trypsin, or matrix metalloproteinases (1,2). This cleavage exposes the 'tethered-ligand' fragment of the receptor, which binds to a second extracellular loop of the receptor and leads to receptor activation. PAR2 is specifically activated by trypsin or trypsin-like proteases. Activated PAR2 stimulates phosphoinositide hydrolysis and calcium mobilization, interacts with β -arrestin, and eventually leads to ERK activation (3). PAR2 expression and activation are mainly associated with inflammatory diseases (3), but may also play a role in cancer development (4,5).

Background References

1. Macfarlane, S.R. et al. (2001) *Pharmacol Rev* 53, 245-82.
2. Ossovskaya, V.S. and Bunnett, N.W. (2004) *Physiol Rev* 84, 579-621.
3. Bushell, T. (2007) *J Physiol* 581, 7-16.
4. Su, S. et al. (2009) *Oncogene* 28, 3047-57.
5. Gessler, F. et al. (2010) *Neuroscience* 165, 1312-22.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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